Final Best Interest Finding and Determination

for the

Sale of Alaska North Slope Royalty Oil

to

Petro Star Inc.

Division of Oil and Gas

Alaska Department of Natural Resources

March 18, 2022

Contents

I. Introduction

The Commissioner of the Department of Natural Resources (DNR), on behalf of the State of Alaska, has negotiated a contract with a term of five years to sell a portion of the State's North Slope royalty oil to Petro Star Inc. (Petro Star), as buyer, and Arctic Slope Regional Corporation (ASRC), as guarantor. The five-year contract will have first deliveries expected to start on January 1, 2023, and end on December 31, 2027. Petro Star was formed in 1984 and is a wholly owned subsidiary of ASRC. It owns and operates two commercial refineries, one in North Pole and another in Valdez. The North Pole refinery was built in 1985, while the Valdez refinery was completed in 1993[1].

The sale of royalty oil under the proposed contract will help meet the in-state need for crude and help facilitate continued operations of Petro Star's two refineries, with the attendant benefits to Alaskans. These two objectives are paramount in the State's decision to sell royalty in-kind to Petro Star through this contract. A third concern in drafting the contract was to avoid interruptions to the delivery of royalty in-kind oil to the in-state refineries. As such, and as dictated by Alaska Statute (AS) 38.06.050 and AS 38.06.055, the DNR Commissioner is seeking legislative approval, having previously obtained the review and recommendation of the Royalty Oil and Gas Development Board for this proposed Petro Star contract.

The negotiations resulting in the attached proposed contract have been carried out under the procedures for a non-competitive disposition of royalty oil set out in Alaska Administrative Code (AAC) 11 AAC 03.030–070. Consistent with its obligation under 11 AAC 03.026(b) and 11 AAC 03.024, under the terms of this contract, the State expects to receive a price for its royalty oil that will be no less than the amount the State would have received, on average, if it elected to keep its royalty in-value.

This "Final Best Interest Finding and Determination for the Sale of North Slope Royalty Oil to Petro Star, Inc." (BIF) provides an analysis to show that the proposed contract is in the best interest of the State. The BIF also provides the proposed contract as an exhibit. After an in-depth consideration of the potential economic, environmental, and social impacts, and the various requirements for sale of the State's royalty oil, with a focus on the criteria specified under the terms of AS 38.05.183(e) and AS 38.06.070(a), the Commissioner finds a negotiated five-year contract for the sale of the State's royalty oil to Petro Star will maximize the State's revenue from its royalty oil and that it is in the State's best interest.

II. Royalty In-Kind Background

The State of Alaska owns the mineral estate, including oil and gas, under State-owned lands. To monetize the value of this estate, the State has entered into lease agreements with third parties who explore for, develop, and produce oil and gas from these lands. The State receives a royalty share of ⅛ to as much as ⅓ of the oil and gas produced from these leased lands on the North Slope[2]. Under the terms of the leases, the State may elect to receive its royalty either "in-kind" (RIK) or "in-value" (RIV). When the State takes its royalty as RIV, the lessees market the State's share along with their own production and pay the State the value of its royalty share. When the State takes its royalty share as RIK, it assumes ownership of the

[1] See http://www.petrostar.com/divisions/refining

[2] In a few instances the royalty rate may be lower, pursuant to AS 38.05.180(j).

oil, and the Commissioner disposes of it through sale procedures, either "competitive" or "non-competitive," under AS 38.05.183.

Figure 1 shows that from November 1979 through December 2021, the State disposed of 973 million barrels through in-kind sales, approximately 45% of its North Slope royalty oil[3]. Through the combination of both competitive and non-competitive RIK sales (non-competitive RIK sales accounted for approximately 95% of all RIK sale dispositions as Figure 1 shows), the State has sold its royalty oil to in-state refineries, and occasionally has auctioned its royalty oil to customers in the Lower 48. Figure 1 summarizes the many North Slope RIK contracts since 1979 and Figure 2 illustrates the monthly volumes of royalty oil committed to these contracts during this period. It should be noted that since 1986 the State has disposed of its RIK oil through negotiated non-competitive sales. Note that Marathon Petroleum Corp. acquired the Kenai refinery from Andeavor, formerly known as Tesoro, in 2018.

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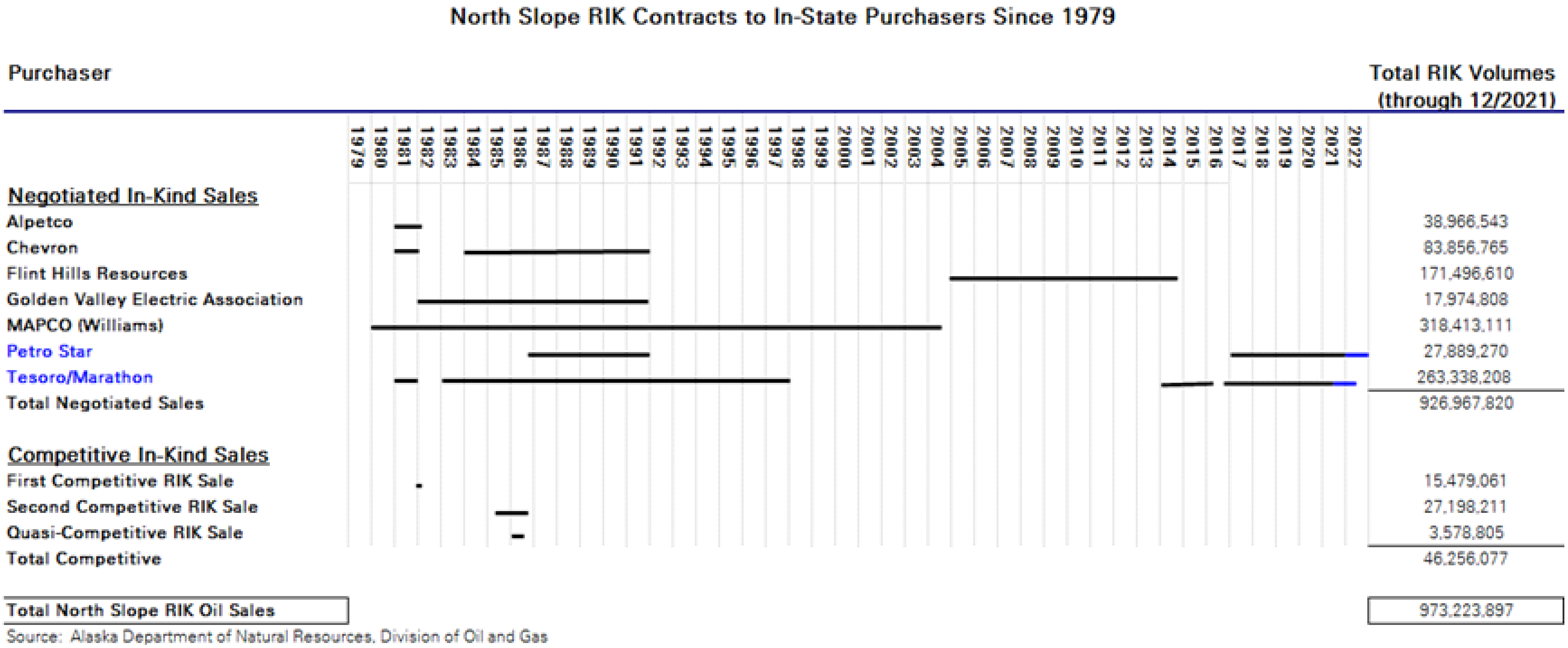
[3] For that period, total North Slope royalty oil was 2.2 billion barrels.

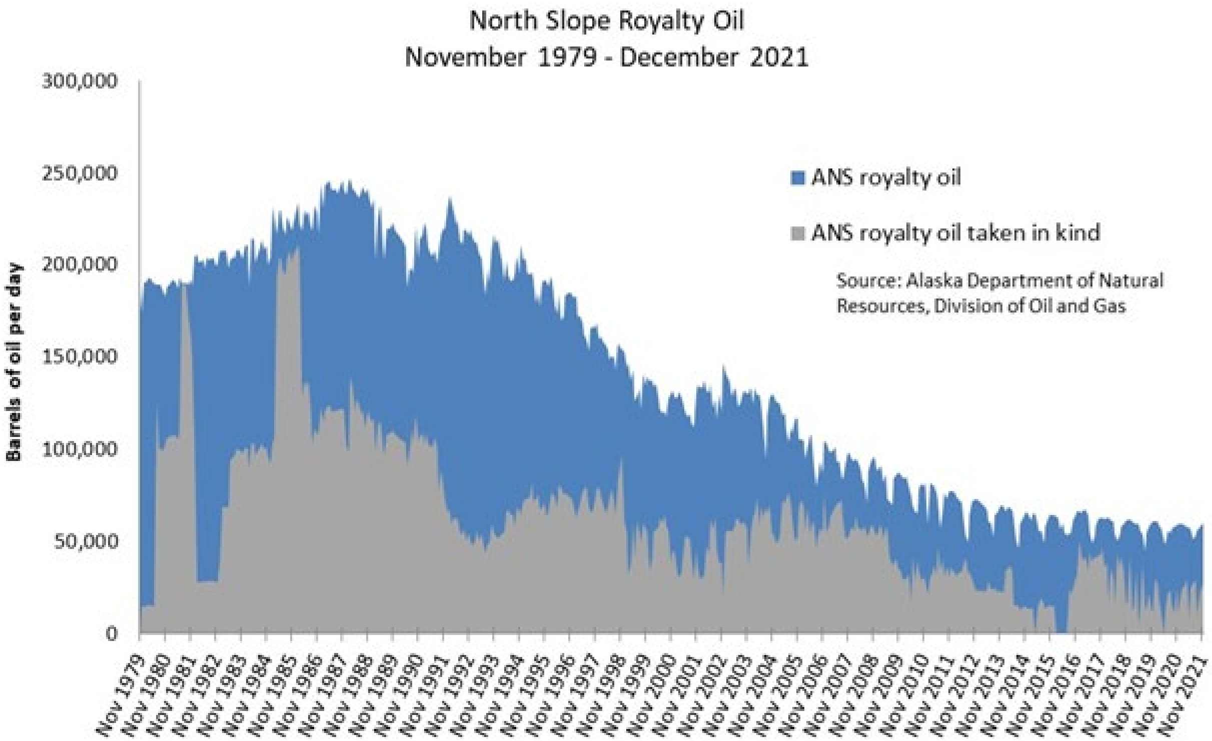
Figure 1: Royalty In-Kind Sales History[4]



Source: Department of Natural Resources, Division of Oil and Gas

[4] Highlighted in blue are the latest contracts in place: Marathon 1-year contract (8/2021 – 7/2022); Petro Star 4-year contract (1/2018 – 12/2021); and Petro Star 1-year contract (1/2022 – 12/2022)

Figure 2: Historical Total ANS Oil[5] Royalty Volume and In-Kind Volumes



Source: Department of Natural Resources, Division of Oil and Gas

A. Royalty Oil Available for Taking In-Kind

The volume of royalty oil the State receives depends on the volume of oil produced from State lands. The proposed contract obligates the State to deliver to Petro Star 12,500 barrels per day (bpd) between January 1, 2023, and December 31, 2024 (years one and two of the contract), and between 12,500 bpd and 10,000 bpd between January 1, 2025, and December 31, 2027 (years three to five of the contract). Based on average forecast volumes[6], the State is expected to have on average about 57,000 bpd (Figure 3 shows that the range is between 48,000 and 67,000 bpd) of total Alaska North Slope (ANS) royalty oil available for taking in-kind for the five-year period contemplated in the proposed RIK contract. Put differently, based on monthly average forecasts, Petro Star's nominations under the proposed contract could represent between 19% and 22% of the State's total North Slope royalty oil in-kind[7].

The State is also publishing a Final Best Interest Finding and Determination for a proposed three-year contract with Marathon Petroleum Supply and Trading LLC ("Marathon"), a subsidiary of Marathon Petroleum Corp., which obligates the State to deliver between a minimum of 10,000 barrels per day (bpd)

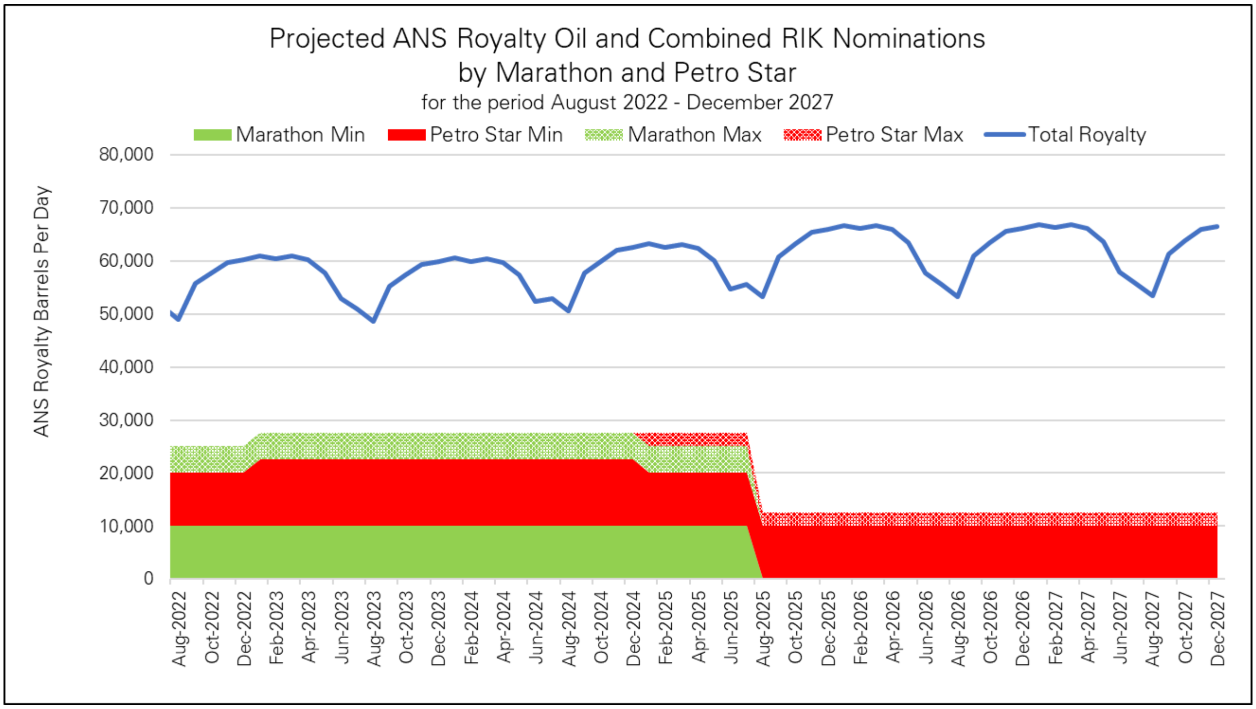
[5] The types of hydrocarbons considered as "ANS oil" are oil, condensates, load diesel, and NGLs.

[6] The forecasted royalty volumes consider future production from currently producing, under development, and under evaluation fields based on the latest 2021 Fall DNR Production Forecast.

[7] As in footnote 6, calculate total royalty volumes for NS by using the latest 2021 Fall DNR Production Forecast but multiply this total by 0.95 to obtain maximum forecasted average RIK barrels available, and then take percentages based on Petro Stars high and low nomination ranges for the five years.

and a maximum of 15,000 bpd to Marathon between August 1, 2022, and July 31, 2025. Based on average forecast volumes, the State is expected to have between 48,000 bpd and 66,000 bpd of total ANS royalty oil available for taking in-kind for the three-year period contemplated in the proposed RIK contract. Put differently, based on monthly average forecasts, Marathon's nominations under the proposed contract could represent between 15% and 31% of the State's North Slope royalty oil. Marathon currently has an effective RIK contract in-place with the State which obligates the State to deliver between a minimum of 10,000 bpd and a maximum of 15,000 bpd to Marathon, between August 1, 2021, and July 31, 2022.

Figure 3[8]: Projected ANS Royalty Oil and Combined RIK Nominations by Marathon and Petro Star



Source: Department of Natural Resources, Division of Oil and Gas

When considering the volume of royalty oil that will be available to the State for taking in-kind, there are three key considerations. First, the State wants to keep a small percentage of dispositions in-value due to higher royalty values for certain leases, and to obtain pricing and other information from in-value dispositions for comparison purposes. For this reason, total nominations declared by Petro Star and any other future RIK purchaser will contractually be limited to 95% of the total North Slope royalty oil available. In other words, up to 95% of the State's royalty oil will be available to be nominated under RIK sales contracts, with the remainder kept in-value.

Second, expected royalty oil production is based on a forecast. Even the best forecasts will most probably be incorrect. Historically, the State has experienced periods where production forecasts, from which the royalty forecast is derived, have been optimistic, with realized production often falling below forecasted

[8] This graph is for illustrative purposes only. Actual royalty available could be different in a given month due to varying production rates and also the refiners' ability to nominate zero barrels according to the contract. The forecast also accounts for seasonal production swings.

levels. The State's royalty forecast, however, would need to be seriously deficient during the term of this contract for the State to struggle to meet its volume obligation.

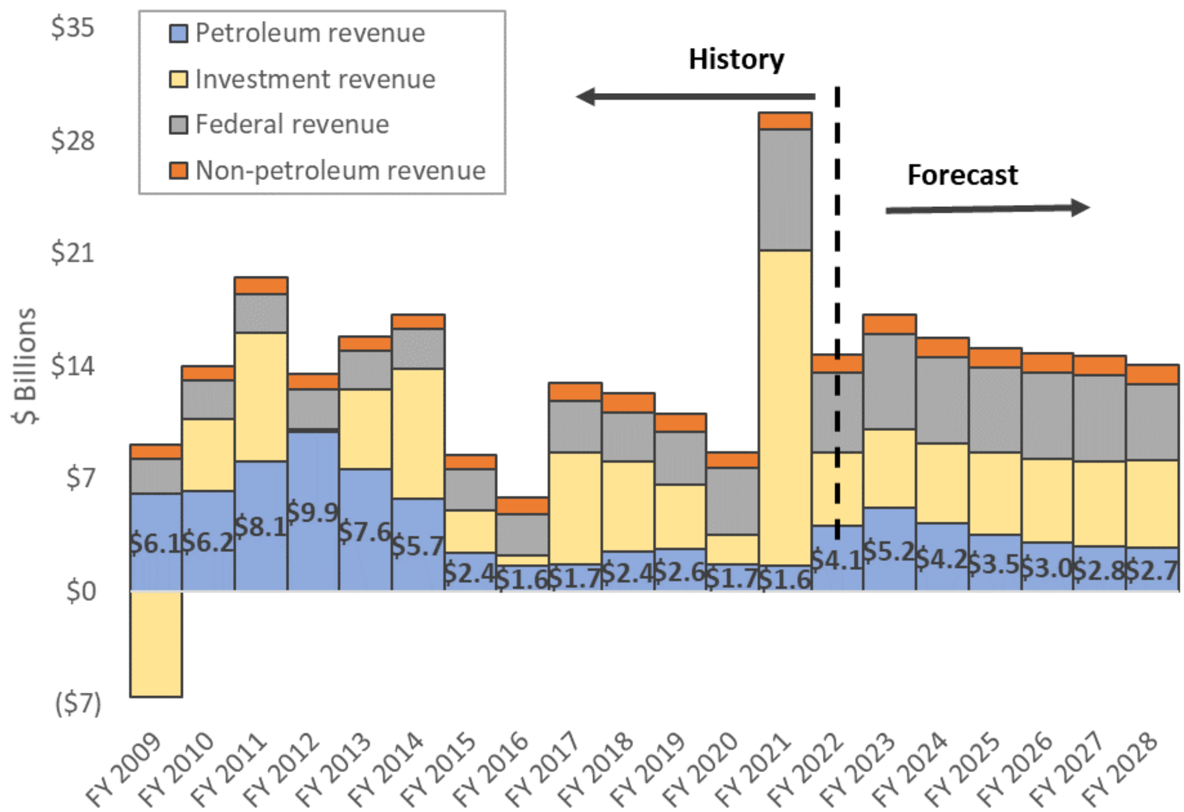
Third, there is substantial seasonality in the observed level of production from the North Slope, with daily production peaking during winter months and declining to its lowest levels during summer months as shown in Figure 3. This seasonality is part of the consideration when negotiating nomination ranges with refiners.

B. State Receives Much More Revenue from RIK Sales Than RIV

The State attempts to maximize the benefits of oil production to the citizens of Alaska when it decides to sell its oil in-kind. One important benefit of the sale of royalty oil in-kind is that it provides the State with incremental revenue that otherwise would not have been realized had the State decided to take its royalty oil in-value. Pursuant to AS 38.05.183(e)(1), the Commissioner shall "consider the cash value offered" for RIK oil when evaluating a purchase proposal. Moreover, AS 38.06.070(a)(1) states that the Royalty Board shall consider "the revenue needs and projected fiscal condition of the state" as a criterion in determining that a proposed contract for the sale of RIK oil is in the best interests of the State. Figure 4 shows that petroleum revenue previously represented a major source of the revenue for the State, especially between fiscal years 2009 and 2014, accounting for almost half of the revenues. Beginning in fiscal year 2015 until fiscal year 2021, the share of petroleum revenue has declined to an average of 20 percent.

The projections for the investment and federal sources of revenue still represent the most significant sources of funds for the State, accounting for approximately 70 percent. The Alaska Department of Revenue ("DOR") estimates that petroleum revenue based on forecasted production will revolve around $4 billion. The magnitude of petroleum revenue projected for the next fiscal years has improved with respect to recent fiscal years but is still lower than the petroleum revenue during the period 2009 through 2014. In this way, it is important that the State finds opportunities to generate incremental revenue. Incremental revenue is critical in times when the performance of the State's investment revenue deteriorates, as was the case in fiscal year 2009. While the criteria to evaluate the best interests of the State include many elements besides revenue, such as encouraging in-State refining, the State has a duty to all its citizens to generate as much revenue as it can from its royalty oil.

Figure 4: Total State Revenue by Source for Fiscal Years 2009 – 2028



Source: Revenue Sources Book Fall 2018, 2019, 2020, and 2021. Spring 2022 RSB used to update petroleum revenue from FY 2023-FY 2028.

Note: Petroleum revenue primarily includes revenue from royalty in-kind and in-value as well as oil and gas production tax, and oil and gas property tax.

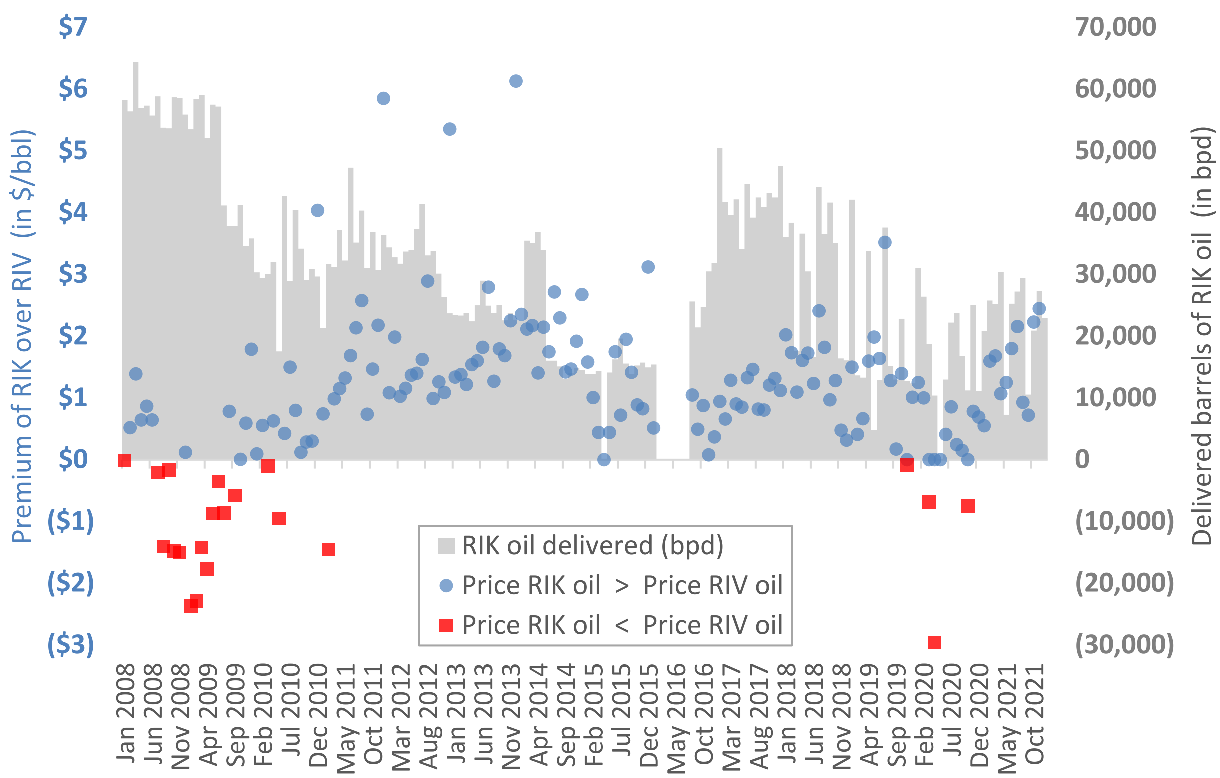
Figures 1 and 2 present the history of RIK contracts for the State. Figure 5 below shows the performance of the RIK contracts that were in place for the period January 2008 through December 2021. Overall, Figure 5 shows that the State has received more revenue from the sale of each RIK barrel compared to its alternative, a RIV barrel. Over this period, the State has sold 149.1 million barrels of royalty oil in kind. By selling the barrels as RIK rather than RIV, the state generated an additional $139.2 million in incremental revenue. Figure 5 shows that the price for each barrel of RIK oil[9] was, on average, at a premium over the average value of a RIV barrel of oil[10]. This premium was 0.93/bbl. Within this average, the price of a RIK barrel of oil was sometimes lower than that of a RIV barrel of oil. This was the case for 21 months during the period of 160 months shown in Figure 5. For instance, in April 2020,

[9] This is a calculated weighted-average "netback" price. Specifically, it uses the RIK-volumes from all RIK contracts in place for a given month as weights and values them following their corresponding netback pricing terms.

[10] Similar to the RIK price, this is also a calculated weighted-average "netback" price. However, now the weights are the RIV volumes from all State-leases for a given month. The valuation in this case is determined by each of the State-lease terms or the applicable royalty settlement agreements.

each barrel of RIK oil generated $2.96 less revenue than each barrel of RIV oil. This BIF will provide a more detailed explanation of the factors, which are outside the control of DNR, explaining the price difference between a barrel of RIK oil and a barrel of RIV oil. Despite those 21 months, the overall performance of these RIK contracts is consistent with the regulatory language in 11 AAC 03.026(b), which specifies that the price obtained in contract for royalty oil in-kind shall be at least equal to the volume-weighted average of the current reported netback prices filed by the oil and gas lessees for royalty-in-value purposes.

Figure 5. Price Premium of a RIK Barrel Versus a RIV Barrel and Delivered Barrels of RIK (January 2008 – December 2021)



Source: Department of Natural Resources, Division of Oil and Gas

Because the price of ANS oil is determined in the destination market- the United States West Coast (USWC)- DNR applies a netback pricing methodology to arrive at a price at the field level. Although ANS oil is sold also within the state of Alaska, the market is not as sizeable, liquid, and transparent as in the U.S. West Coast. To find the royalty value, which is equivalent to finding the price of ANS oil at the field, DNR subtracts the transportation costs and other adjustments to the price of ANS oil at the U.S. West Coast (i.e., the "destination value"). The RIK contracts utilize the following pricing structure for a RIK barrel of oil:

Equation (1):

$$\begin{matrix} RIK \\ netback\ price \end{matrix} = \begin{bmatrix} Destination \\ value \end{bmatrix} - \begin{bmatrix} RIK \\ differential \end{bmatrix} - \begin{bmatrix} Tariff \\ allowance \end{bmatrix} \pm \begin{bmatrix} Quality\ bank \\ adjustment \end{bmatrix} - \begin{bmatrix} Line \\ loss \end{bmatrix}$$

Most of the production of ANS oil is typically sold in the U.S. West Coast. As a result, the value of a barrel of RIV oil follows the same structure[11].

Equation (2):

$$\begin{matrix} RIV\ netback \\ price \\ (out\ of\ state) \end{matrix} = \begin{bmatrix} Destination \\ value \end{bmatrix} - \begin{bmatrix} Marine \\ transportation \\ allowance \end{bmatrix} - \begin{bmatrix} Tariff \\ allowance \end{bmatrix} \pm \begin{bmatrix} Quality\ bank \\ adjustment \end{bmatrix} - \begin{bmatrix} Line \\ loss \end{bmatrix}$$

Therefore, the main difference between equations (1) and (2) comes from the comparison between the RIK differential and the marine transportation allowance.

While the U.S. West Coast is the predominant destination market for ANS oil, not all producers in the North Slope sell their ANS oil directly to refineries in the Lower 48. Some producers sell ANS oil to refineries in Alaska or to other North Slope producers for further marketing of that oil outside of Alaska. The netback price calculation of a barrel of RIV oil in this scenario does not include an allowance for the marine transportation cost given that such oil, at that point of sale, is not being transported by any tankers outside of Alaska, but rather contains a "location differential." Given that the pricing of ANS oil begins at the destination market at the Lower 48, the location differential is another element in the netback pricing methodology needed to calculate the price of a barrel of RIV oil at the field. The location differential can be smaller or greater than the marine transportation allowance.

Equation (3):

$$\begin{matrix} RIV\ netback \\ price \\ (in-state) \end{matrix} = \begin{bmatrix} Destination \\ value \end{bmatrix} - \begin{bmatrix} Location \\ differential \end{bmatrix} - \begin{bmatrix} Tariff \\ allowance \end{bmatrix} \pm \begin{bmatrix} Quality\ bank \\ adjustment \end{bmatrix} - \begin{bmatrix} Line \\ loss \end{bmatrix}$$

More than 90 percent of RIK oil taken by DNR comes from Prudhoe Bay and Kuparuk River Units. If DNR were to select its royalty oil from these fields as RIV, the price of a barrel of RIV oil would then be subject to a deduction for the marine transportation allowance. When taking its royalty oil as RIK (instead of RIV) from these same fields, DNR is essentially substituting the marine transportation allowance for the RIK differential, following equations (1) and (2) above. Therefore, the main driver of the price premium observed in Figure 3 above comes from the difference between the marine transportation allowance and the RIK differential precisely because DNR is selecting RIK oil from fields whose production would otherwise be sold out of state and, thus, be subject to a deduction reflecting the marine transportation allowance. Because DNR does not select RIK oil from fields where the ANS oil is initially sold within the state of Alaska, equation (3) is irrelevant for the analysis of the performance of the RIK price over the RIV price. In other words, the relevant comparison is between equations (1) and (2). The other elements in the netback pricing methodology, such as destination value, tariff allowance, quality bank adjustment, and line losses in equations (1) and (2), can also vary. Sections III and IV below will discuss these elements in more detail.

As shown in Figure 2, the amount of royalty oil that DNR selects as RIK varies depending on the demand from the RIK buyers and the total royalty oil available. While DNR maintains a ceiling of 95 percent for taking royalty oil in-kind, DNR typically takes more than 5 percent of the total royalty oil from a given field in-value. Thus, knowing how the royalty oil in-value would be priced is important when comparing the price of a barrel of RIK to that of RIV. In addition to selecting its royalty oil in-kind from fields

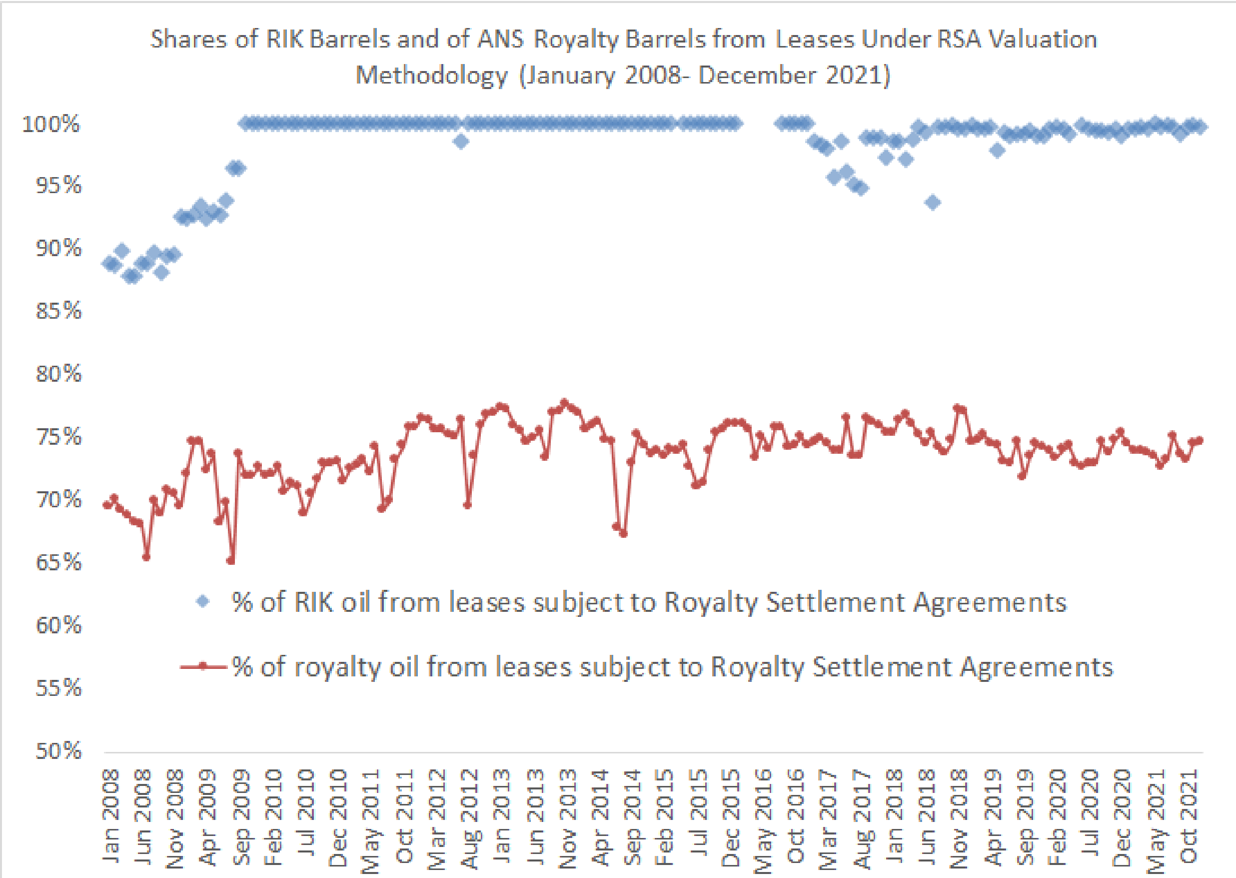
[11] When comparing the RIK price versus the RIV price, the appropriate RIV netback pricing computation in this analysis does not consider the field cost deductions that some DL-1 leases receive when calculating the wellhead value.

where producers would typically sell ANS oil in the U.S. West Coast, the value of a barrel of RIV oil is determined by the various royalty settlement agreements (RSAs) between the State and some North Slope producers[12]. The RSAs define how a barrel of RIV oil will be priced by assuming that such production will be sold outside of Alaska, which is consistent with the specification in equation (1).

For the period January 2008 to December 2021, Figure 6 below shows two features of the ANS royalty oil. First, on average, 94 percent of the ANS royalty oil that the State selected in-kind came from leases subject to terms of the various RSAs. In other words, the total royalty taken in-kind came primarily from leases where, had that royalty been taken in-value, those barrels would have been transported outside of Alaska, and the valuation of those royalty barrels would have used the marine transportation allowance prescribed by the applicable RSAs. Second, about 74 percent of the total ANS royalty oil comes from leases where the royalty in-value is determined by the RSAs. As a result of these two characteristics, for most cases, the observed differences in the netback pricing of RIK and RIV observed in Figure 5 came from the different values of the netback-pricing formulas (i.e., equations (1) and (2)) between the RIK contracts in place and those of the RSAs.

[12] These are BP Exploration (Alaska) Inc. (BPXA), ConocoPhillips Alaska Inc. (CPAI), ExxonMobil Alaska Production Inc. (Exxon), and Chevron U.S.A. Inc. (Chevron). In 2020, Hilcorp Energy I, L.P. acquired BPXA's interests in Alaska. Additionally, in late 2014, BP assigned a portion of its interest in Milne Point, Duck Island, and Northstar to Hilcorp Alaska, LLC (Hilcorp). Part of the royalty from that assignment is still valued in terms of the royalty settlement agreement with BPXA.

Figure 6. Shares of RIK barrels and of ANS royalty barrels from leases under RSA valuation methodology

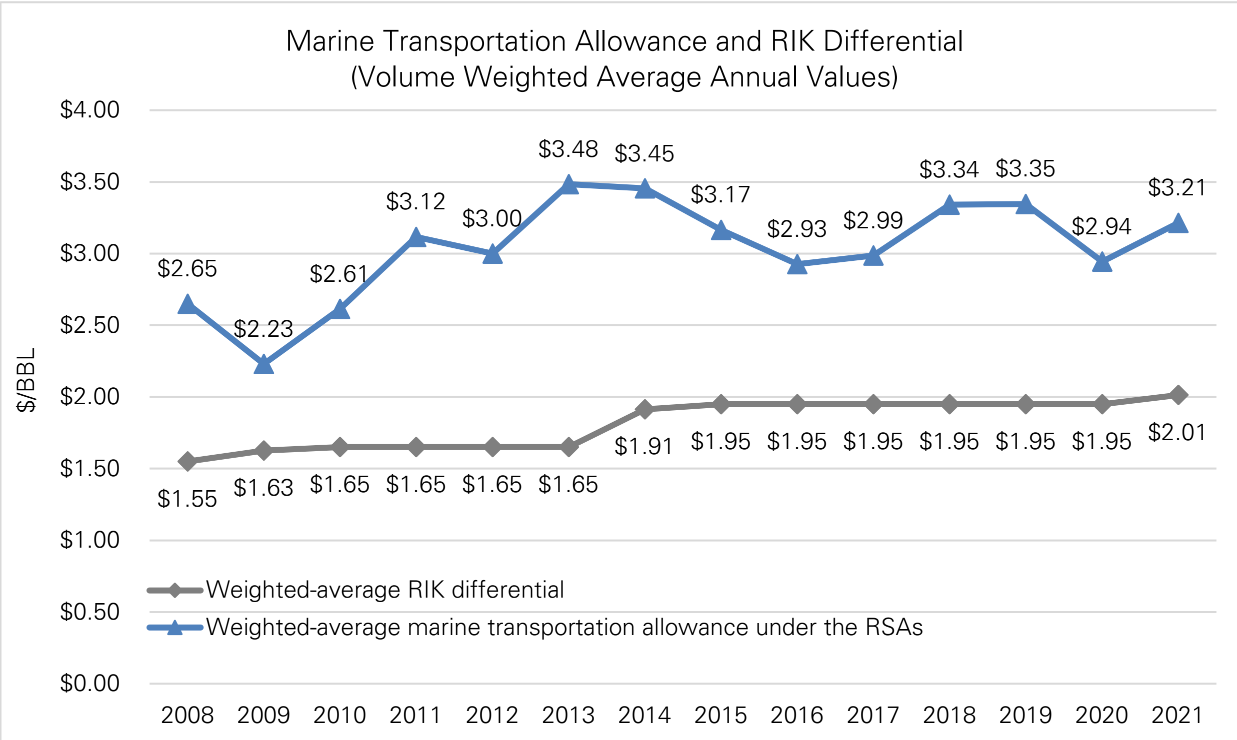


Source: Department of Natural Resources, Division of Oil and Gas

As shown later in this finding, from the netback pricing formulas, the element that contributed the most to the superiority of the RIK price over the RIV price, observed in Figure 5, was the RIK differential, a variable approximating the values of the location differential for in-state sales of crude oil. For oil that is sold within the state, as is also the case of ANS royalty oil sold in-kind in the proposed RIK contracts, the seller and the buyer agree on a location-based deduction that is used to determine the price difference for the oil sold on the U.S. West Coast versus the oil sold in Alaska, which is later used to calculate the price at the point of production. In contrast, the marine transportation allowance is intended to represent the actual and reasonable cost incurred by lessees in physically carrying the ANS crude from Valdez to an out-of-state location via a tanker. Although in some cases, previous out-of-state sales of ANS oil took place in Asia and Hawaii, most of it was delivered in the USWC. Therefore, the observed price difference in Figure 5 originated mostly from the fact that, as Figure 7 below shows, during the period of analysis, the marine transportation allowance from the RSAs was consistently greater than the deductions coming from the RIK differentials from the RIK contracts in place.

As expressed before, the elements making up the netback pricing methodology for both RIK and RIV usually differ in-value. However, as shown later in this BIF, the observed difference between the RIK differential and the marine transportation allowance was the major contributor to the pricing superiority of RIK over RIV from January 2008 to December 2021, despite the variation in the other elements of the netback pricing formulas such as destination value, tariffs, quality bank, and line loss.

Figure 7. Marine transportation allowance and RIK differential



Source: Department of Natural Resources, Division of Oil and Gas

For the period under evaluation (January 2008 to December 2021), the RIK-RIV differences in the tariff allowance, quality bank adjustment, and line loss were relatively small ($-0.024 total annualized average over this period for Prudhoe Bay Unit) in comparison with the differences of the other netback price components. Figure 6 above showed that almost all the RIK came from leases following the valuation method prescribed in the RSAs. Since 2013, more than 90% of RIK has come from Prudhoe Bay and Kuparuk River Units. Figure 8 below shows the RIK-RIV variations in the tariff allowance, quality bank adjustment, and line loss for the RIK and RIV volumes from Prudhoe Bay Unit. Except for three months, July 2012, May 2015, and September 2021, these variations were less than $1.00/bbl (numbered peaks/troughs in Figure 8). For example, in this graph, a positive value for the quality bank adjustment means that the RIK barrel received a higher quality bank valuation than its RIV alternative for oil from the same pool. A positive value for "loss" means that the RIK barrel was subject to a smaller loss adjustment than the RIV barrel. Lastly, a positive value for "tariffs" means that the deductions for the transportation costs in the pipelines for the RIV barrel were much larger than those for the RIK barrel. All of these adjustments would lead to a barrel of RIK oil being greater than a barrel of RIV oil, all else held constant.

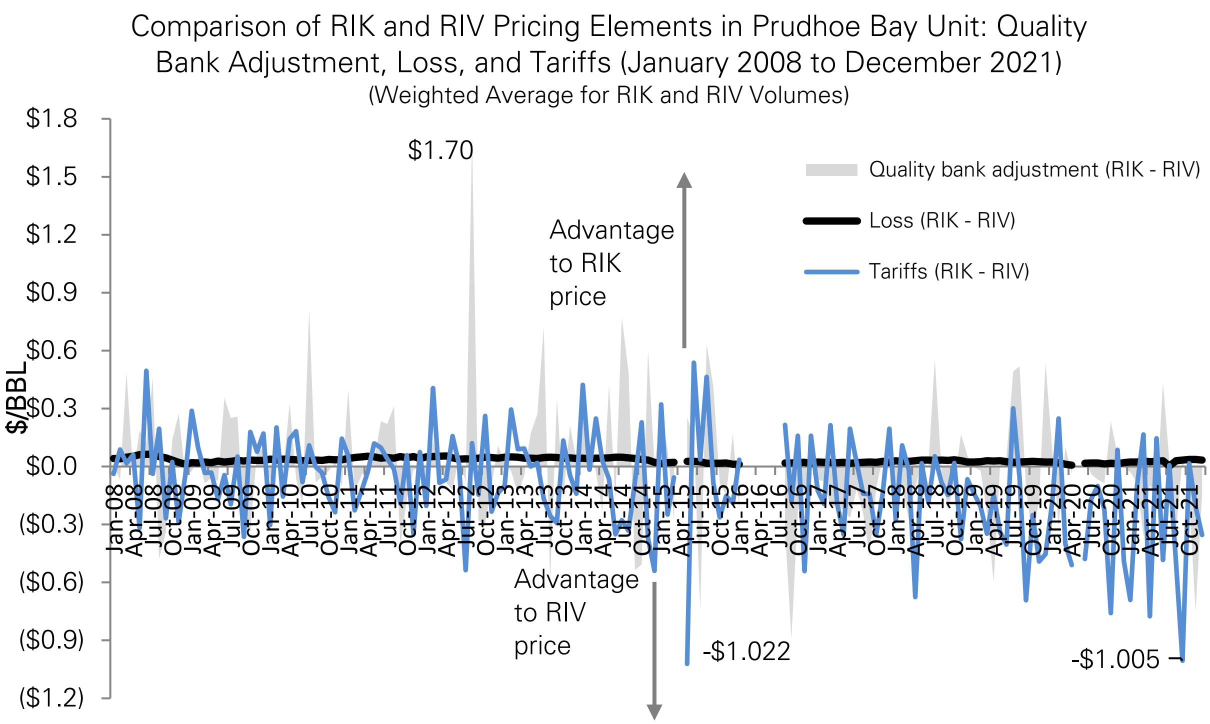
The differences in the tariff allowance used for RIV and RIK stem from the definitions used in the RSAs versus those used in the corresponding RIK contracts. The RSA with BP defines the Trans-Alaska Pipeline System (TAPS) tariff allowance as the ownership-weighted average interstate TAPS tariff filed with the Federal Energy Regulatory Commission (FERC)[13]. The RSA with ConocoPhillips defines the TAPS tariff allowance as the minimum of two amounts: (1) its actual average interstate tariff paid, and (2)

[13] See Article III, section 3.4, subsection (b) of the *ANS Royalty Litigation Settlement Agreement between BP Exploration (Alaska) Inc. and State of Alaska*, December 31, 1991.

the volume-weighted average of different interstate tariffs needed to transport all production shipments, allocating such volumes with priority to the carriers with the lowest tariffs[14].

Additionally, the RSA with Exxon multiplies the amount defined in the BP RSA by a ratio of the volumes delivered from the common-carrier pipelines at destination to the volumes received by the common-carrier pipelines at the applicable Lease Automatic Custody Transfer (LACT) units[15], thereby introducing another element of variability. In the case of the RIK contracts in-place during the period January 2008 through December 2021[16], similarly to the case of the BP RSA, the TAPS tariff allowance is defined as the ownership weighted average of the minimum interstate TAPS tariff on file with FERC[17]. Therefore, for some months, the weighted-average TAPS tariff allowance used in the valuation of RIV was smaller than that for RIK given these different methodologies between the RSAs and FERC.

Figure 8. Comparison of RIK and RIV pricing elements in Prudhoe Bay Unit



Source: Department of Natural Resources, Division of Oil and Gas

Also, in general, the valuation of the quality of the average barrel of RIK was different than that of the average value of RIV. These discrepancies arise from (1) the administrative fee that lessees pay to the

[14] See section B, subsection III.A.5 of the *Thirteenth Amendment to ANS Royalty Settlement Agreement between ConocoPhillips Alaska, Inc. and the State of Alaska*, March 1, 2008.

[15] See Article III, section 3.4, subsection (b) of the *ANS Royalty Litigation Settlement Agreement between Exxon Corporation and State of Alaska*, December 31, 1991.

[16] This is also the case for the recent contracts and the currently proposed RIK contracts with Petro Star and Marathon.

[17] See, for instance, Article II, section 2.3 of the proposed final contract in the *Final Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Tesoro Refining & Marketing Company, LLC*, Alaska Department of Natural Resources, October 24, 2013.

Quality Bank Administrator, and (2) the timing of when the quality bank adjustments are actually applied. For instance, ConocoPhillips uses a quality bank adjustment value with a lag of two months in relation to the corresponding production month; BP (and now Hilcorp) files a temporary number subject to a true-up adjustment performed twice a year; and Exxon provides a contemporaneous number in relation to the production month. The average barrel of RIK is also calculated contemporaneously for the corresponding production month. Lastly, "losses" are the deductions resulting from the reduction in the measurement of volume from the Pump Station No. 1 to the Valdez Marine Terminal, and for the average RIK barrel these losses were lower than for the average RIV barrel. For the case of ConocoPhillips and BP, their corresponding RSAs prescribe that the valuation of the RIV barrel use a loss factor of 0.0013[18], whereas the Exxon RSA establishes a loss factor of 0.0016[19]. In contrast, the previous RIK contracts utilize a much smaller loss factor: 0.0009[20]. As a result, when considering the combined effects of the differences in these components of the netback pricing formula, they have accounted for \$0.022/bbl per month in favor of the average RIV barrel over RIK for the royalty barrels coming from Prudhoe Bay unit for the period January 2008 to December 2021.

Like the previous RIK contracts, the currently proposed RIK contract defines the destination value as the monthly average of the daily average ANS price assessments at the USWC by reporting firms Platts and Reuters[21]. In contrast, RIV oil, which is valued pursuant to the lease provisions or RSAs terms, may use other ANS reporting firms' assessments or even use different valuation methodologies than those found in the RIK contracts. For this reason, there will be some divergence between the destination value assessments for RIK and those used for RIV. For instance, in addition to Platts and Reuters, the valuation of some ANS production coming from non-RSA leases is based on the ANS USWC price assessments from Argus, another price reporting firm. Another source of divergence is, for instance, the valuation of Exxon's royalty corresponding to its RSA-leases. In Exxon's RSA, the destination value is determined by a comparison between the assessment of ANS at the USWC and a basket of non-Alaskan crudes. Lastly, although much less frequent than the previous cases, some ANS production from non-RSA leases is valued using the NYMEX's daily settlement quoted price for Light Sweet Crude Future for the delivery month average as the destination value. Figure 9 below shows the differences in the destination value for RIK and RIV in the Prudhoe Bay Unit for the period January 2008 to December 2021. In this case, the destination values for RIK and RIV are comparable since royalty in both cases use the ANS price assessment at the USWC. Positive values in the graph indicate that the destination value assessment of the RIK barrel was greater than that of the RIV barrel. It is also important to note that, from November 2008 to February 2011, the destination value for RIK was consistently and considerably lower than that for RIV. As a result, these unfavorable destination value assessments reduced any RIK price advantage over RIV obtained through the RIK differential, holding other netback elements fixed.

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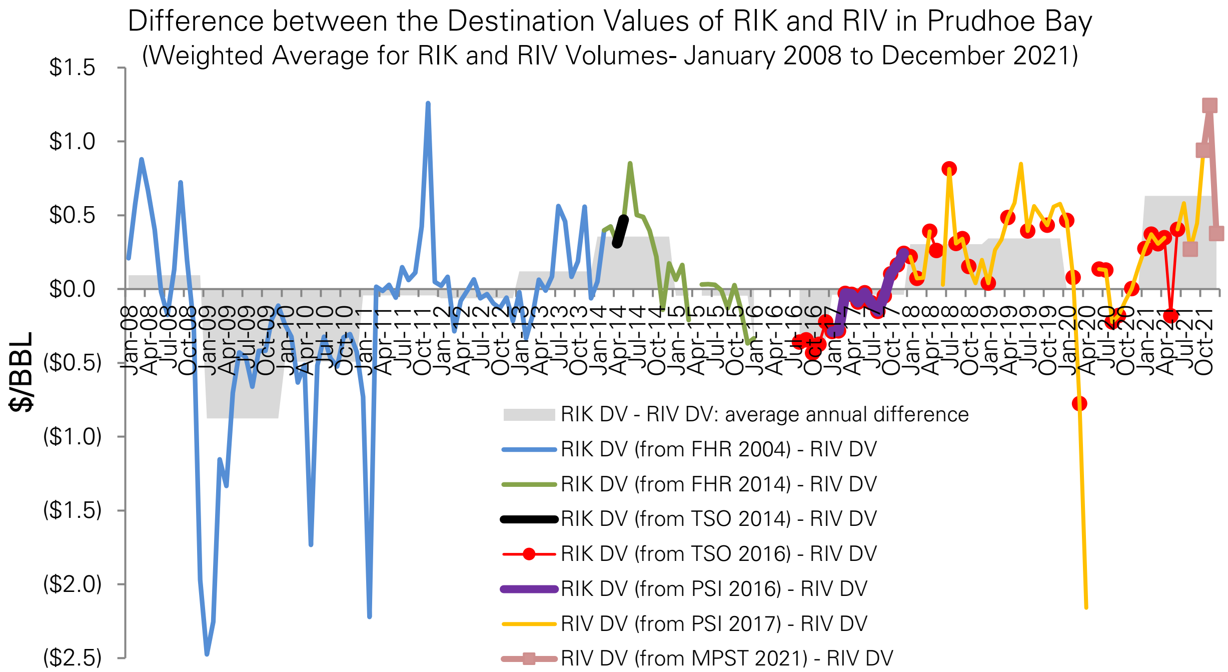
[18] See section B, subsection 5, III.A.(g) of the *Eighth Amendment to ANS Royalty Settlement Agreement between Phillips Alaska, Inc. and the State of Alaska*, August 1, 2002; and section III, subsection B.2 of the *BP 2002 Royalty Destination Value Settlement and June 2002 Amendment to the 1991 BP Royalty Settlement Agreement as Amended*, June 2002.

[19] See section A, subsection (5).3.6 of the *Agreement Regarding the 2001 Exxon RSA Reopeners*, September 20, 2006.

[20] See, for instance, Article II, section 2.3 of the proposed final contract in the *Final Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Tesoro Refining & Marketing Company, LLC*, Alaska Department of Natural Resources, October 24, 2013. The recently approved Petro Star and Marathon 2021 RIK contracts and the currently proposed RIK contracts with Petro Star and Marathon utilize the same loss factor.

[21] *Ibid*.

Figure 9. Difference between the destination values of RIK and RIV in Prudhoe Bay



Source: Department of Natural Resources, Division of Oil and Gas

Even though Figure 9 shows that the destination value for RIK could be lower than for RIV, the negotiated values of the RIK differential from each RIK contract in place during the period of January 2008 to December 2021 were generally low enough to absorb these differences in 139 out of 160 months or 87 percent of the time (see Figure 5). The RIK price was generally still higher than the RIV price even for those months when the destination value for RIV was greater than that for RIK; when the tariff allowance was lower for RIV; when the quality bank adjustments were greater (if positive) or smaller (if negative) for RIV; or when the line loss was lower for RIV. As explained in more detail in sections III and IV below, DNR expects that, for the combined term of the contracts in consideration, (i) the majority of the future ANS royalty available to take in-kind will still come from leases subject to the valuation methodology of the RSAs, and that (ii) the deduction from the proposed RIK differential will be lower than the one from future values of the marine transportation allowance per barrel, and thus make it likely that the RIK price will be greater than the RIV price.

Fulfilling the regulatory requirement of the RIK price being at least as much as the RIV price represents a necessary condition for disposing of royalty oil in-kind rather than in-value. However, besides meeting this necessary condition, DNR also seeks to maximize the benefits of oil production when selling its royalty oil in-kind. As expressed before, the RIK differential can approximate the market value of the location differential used for sales of ANS oil within the state. Since the currently proposed RIK contract will sell volumes of royalty oil to an in-state refinery, the value of the RIK differential should be closer to the market value of the Alaska location differential instead of resembling the average cost of transportation from Valdez to the USWC.

C. Commercial Refining in Alaska

Alaska currently has five active in-state refineries, operated by four organizations: Hilcorp, ConocoPhillips, Petro Star, and Marathon. Of these five refineries, three produce refined petroleum products for the consumer market[22] (Marathon's Kenai refinery, Petro Star's North Pole refinery and Petro Star's Valdez refinery). All three of these refine Alaskan crude and supply the Alaska retail market with refined petroleum products.

Petro Star's North Pole and Valdez refineries both exclusively refine ANS drawn from TAPS. As was discussed in the previous 2021 Petro Star one year RIK BIF, Petro Star's North Pole refinery has a maximum throughput capacity of 22,000 barrels per day, while the Valdez refinery has a maximum throughput of 60,000 barrels per day.

Currently, approximately 65% of the refined product produced by Petro Star is jet fuel and the remaining output is ultra-low sulfur diesel, asphalt, and heating oil. Most of the refined product produced by Petro Star will typically remain in Alaska. Petro Star operates ten retail fuel stations under its Sourdough Fuel and North Pacific Fuel divisions. Of those stations, three are located on the Aleutian Islands and the balance are in the Fairbanks/North Pole area.

Unlike the other two commercial refineries in Alaska, Marathon's Kenai refinery is not tied into the TAPS. Being located off TAPS impacts operations in two central ways. First, rather than drawing all its feedstock directly from TAPS, some feedstock at the Kenai refinery arrives over water. The ability to accept waterborne cargos means that, unlike the other two commercial refineries in the state, the Kenai refinery can source crude from the world market, the Valdez Marine Terminal (VMT), or the Cook Inlet. While importation of non-Alaskan crude is possible at the Kenai refinery, it is a relatively infrequent event. In recent years, approximately 90% of the crude refined in the Kenai facility has been Alaskan crude, either from the Alaska North Slope or Cook Inlet.

The second key impact from being located away from TAPS has on operations at the Kenai refinery is its inability to re-inject unprocessed portions of a barrel of crude back into the pipeline. The Kenai refinery, like all commercial refineries in Alaska, does not possess the technological sophistication to transform every portion of a barrel into refined product. The portion of a barrel not refined into saleable product, the so-called "heavy ends," must be loaded onto a ship and transported to another Marathon facility on the USWC (or sold to a third party) for further processing. Furthermore, unlike the Petro Star North Pole and Valdez refiners, which fuel the refineries with the crude extracted from TAPS, Marathon fuels its refinery with natural gas from Cook Inlet[23].

Most of the end-use products refined at the Kenai facility will be consumed by the Alaska market. Nearly all the jet fuel produced at the Kenai refinery will be transported via pipeline to Anchorage, with the majority of Anchorage-bound jet fuel consumed at Ted Stevens Anchorage International Airport. Stemming from its access to waterborne transportation, although infrequent in occurrence, Marathon also retains the ability to ship refined product out of Alaska.

D. RIK's Role in Alaskan Commercial Refining

The State of Alaska's RIK has played a critical role in the development and continued operation of the Alaskan refining sector. All four commercial refineries in the state, the three currently operating refineries and FHR's North Pole refinery that closed in 2014, have had an RIK contract at various points in time.

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[22] Hilcorp and ConocoPhillips operate small topping plants on the North Slope that primarily support oil industry operations and are mostly geographically limited to the North Slope.

[23] *The State of Alaska's Refining Industry. Report prepared for the Alaska Department of Natural Resources*. Econ One Research, Inc. March 2015, page 43.

Three of these four refineries refined royalty oil, while a royalty contract backstopped financing for the fourth.

The State has a long history selling its North Slope RIK to the refinery in Kenai. The state supplied the Kenai refinery with ANS crude between July 1980 and January 1982, between January 1983 and December 1998[24], and again since February 2014. In total, as of December 2021, the Kenai refinery has purchased 263.3 million barrels of Alaska North Slope royalty oil under nine separate RIK contracts. Under the terms of the existing and past contracts, the people of Alaska enjoy the economic, social, and labor market benefits of petroleum products refined from Alaskan crude by Alaskans in Alaska.

The historical relationship between the sale of RIK and Petro Star's North Pole refinery is like the role played by royalty oil in FHR's North Pole refinery and Marathon's Kenai refinery. As presented in the previous Petro Star 2016 BIF, the State sold North Slope royalty oil to Petro Star's North Pole refinery from December 1986 through December 1991. In total, the State supplied Petro Star's North Pole refinery with just over 3 million barrels of North Slope royalty oil under that 5-year contract. Since 1985, the State has supplied Petro Star's North Pole and Valdez refineries with approximate 28 million barrels of North Slope RIK oil.

Perhaps the most interesting role played by a royalty oil contract was the 1992 contract with Petro Star Valdez Joint Venture. In mid-1991, Petro Star and its joint venture partners contacted DNR to secure a royalty oil contract for a proposed refinery in Valdez. DNR ultimately negotiated a ten-year contract with Petro Star and its joint venture partners to supply the proposed Valdez refinery with up to 30,000 barrels per day of royalty oil. With this contract in hand, the joint venture secured the needed financing and constructed the Valdez refinery. The royalty contract helped the joint venture secure financing by demonstrating guaranteed access to an on-going supply of feedstock. Ultimately, Petro Star Valdez Joint Ventures never took possession of a single barrel of royalty crude under the ten-year contract, preferring, rather, to secure its feedstock from the private market.

DNR believes the proposed RIK contract with Petro Star is important to meeting in-state demand for crude and to facilitating the continued operation of Petro Star's refineries, with the attendant positive implications on the economy of the state. These potential benefits are also the bases for the one-year contract with Petro Star that DNR negotiated in September 2021 that would last from January 2022 to December 2022. Unlike the Marathon Kenai refinery, which has access to waterborne crude oil and thus can procure non-ANS crude oil, the Petro Star refineries can only access crude through TAPS. If ANS production declines over the term of this contract, ANS producers capable of transporting such crude to destinations outside Alaska will have greater unused tanker capacity.[25] In this scenario, they may prefer to keep their equity crude and compete more fiercely for more ANS crude from the small producers. Therefore, the Petro Star refineries could find that securing the needed volumes of crude oil for the next years becomes less certain, with shorter-lived contracts. Additionally, Petro Star could face a relatively costlier price for that crude. The U.S. West Coast refineries, tailored to run ANS, and facing diminishing ANS supplies, likely will keep ANS as a premium crude on the West Coast. The proposed RIK contract with Petro Star for a term of five years will allow Petro Star a stable ANS supply through 2027, at a price

[24] The State also supplied the Kenai refinery with 22.1 million barrels of Cook Inlet royalty crude between January 1979 and September 1985.

[25] Discussed below is the case of ANS production remaining stable as currently projected, and then rising over the life of the contract, per the DOR Fall 2021 RSB.

that could help to maintain the economic viability of its refineries while maximizing the State revenues from the sale of its royalty.

E. Alaska's Fiscal Condition is Wedded to Oil and Gas

Both the economic and the fiscal health of Alaska are wedded to oil and gas. In 2020, the total market value of all goods and services produced in Alaska totaled $49.82 billion[26]. In 2020 approximately one out of every twenty of those dollars was generated by oil and gas. Table 1 shows that the total unrestricted revenues from the oil and gas sector are projected to represent approximately 30-53% of the Unrestricted General Fund Revenue. Notably, we can see in Table 1 the oil and gas royalty's contribution to the Unrestricted General Fund Revenue remains important, with projected shares of approximately 16-17% for the next six fiscal years.

Table 1: Oil and Gas Royalties and General Fund Unrestricted Revenues by Fiscal Year
(In millions of dollars)

	History (fiscal year, millions of dollars)				Forecast (fiscal year, millions of dollars)						
Fiscal Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Unrestricted General Fund											
Unrestricted General Fund Investment Revenue				$3,121	$3,065	$3,377	$3,620	$3,834	$4,052	$4,299	$4,397
Unrestricted General Fund Non-Petroleum Revenue	$473	$3,306	$3,446	$444	$368	$505	$528	$535	$540	$547	$564
Total Unrestricted Petroleum Revenue	$1,941	$2,044	$1,083	$1,218	$3,520	$4,449	$3,517	$2,828	$2,394	$2,154	$2,099
Total Unrestricted General Fund Revenue	$2,414	$5,350	$4,529	$4,783	$6,953	$8,330	$7,665	$7,197	$6,986	$7,000	$7,060
Unrestricted Pretroleum Revenue											
Petroleum Property Tax	$122	$120	$123	$119	$124	$116	$113	$112	$110	$107	$106
Petroleum Corporate Income Tax	$66	$218	$0	-$19	$190	$340	$320	$295	$280	$280	$275
Oil and Gas Production Tax	$741	$587	$277	$381	$1,941	$2,534	$1,754	$1,190	$870	$657	$596
Oil and Gas Hazardous Release	$9	$8	$8	$8	$0	$0	$0	$0	$0	$0	$0
Oil and Gas Royalties-Net *	$978	$1,075	$660	$709	$1,264	$1,441	$1,313	$1,214	$1,117	$1,093	$1,105
Bonuses, Rents, and Interest	$25	$37	$15	$20	$1	$17	$17	$17	$17	$17	$17
Total Unrestricted Petroleum Revenue	$1,941	$2,044	$1,083	$1,218	$3,520	$4,449	$3,517	$2,828	$2,394	$2,154	$2,099
Total Unrestricted Petroleum Revenue as a share of Total Unrestricted General Fund Revenue	80%	38%	24%	25%	51%	53%	46%	39%	34%	31%	30%
Royalties ** as a share of Total Unrestricted General Fund Revenue	41%	20%	15%	15%	18%	17%	17%	17%	16%	16%	16%

Source: DOR RSB Fall 2019-2021, and RSB Spring 2022. Spring 2022 RSB numbers taken from Chapter 2, Table 5, page 9.

* Oil and Gas Royalties-Net refers to the revenue from oil and gas royalties allocated to the General Fund.

** Royalties in this case refers to Oil and Gas Royalties-Net.

[26] U.S. BEA: http://www.bea.gov/regional/index.htm

While the historical revenue generated by the oil and gas royalties included those realized from RIK sales, the DOR forecast of the oil and gas royalty revenues shown in Table 1 considers the royalty in-value only. The potential additional revenue generated through RIK sales represents an additional source of revenue for the State.[27]

F. RIK Oil Sale Procedure and Schedule

Before executing a contract for the disposition of RIK, the Commissioner must find the disposition is in the best interests of the State (11 AAC 03.010 (b)). The Commissioner establishes the terms, conditions, and methods of disposition of the State's RIK oil (11 AAC 03.010 (a)). There exists a statutory presumption that taking royalty oil in-kind, with sale to in-state customers, by competitive bid is in the State's best interest.[28] That being said, the State has many competing interests and the State's best interest may be served through a non-competitive disposition of the State's royalty in-kind, as provided in AS 38.05.183(a).

Given the statutory presumption that the State's best interest is served through a competitive disposition of royalty oil to in-state customers, DNR first sought to determine the level of interest on the part of in-state producers and refiners in the purchase of the State's RIK oil. To gauge the level of interest in the market, DNR distributed an informal solicitation of interest in RIK oil in August 2021 (Exhibit 2) to different parties who might have an interest in purchasing RIK oil. Beyond simply gauging the market's interest in RIK oil, this solicitation outlined the State's desire to obtain "special commitments" that would meaningfully address the high cost of energy in Alaska or the need for a greater supply of crude oil for use in the state. DNR published the solicitation of interest letter in the Alaska Public Notice website[29]. This informal solicitation of interest was directly transmitted to various organizations, including ConocoPhillips, ExxonMobil, Hilcorp, Marathon, Overseas Shipholding Group, Inc., and Petro Star.

The informal solicitation generated three responses regarding the purchase of the State's RIK from ConocoPhillips, Petro Star, and Marathon (Exhibit 3). Only Petro Star and Marathon initially expressed interest in purchasing RIK volumes. Both stated that they were willing to comply with the in-state processing requirement. Only one of these parties expressed willingness to participate in an auction for royalty oil in-kind (Exhibit 3). Considering the very small number of interested parties, their comments about participating in a competitive disposition, and the low probability that competitive bidding would maximize total State value, the Commissioner determined that seeking a non-competitive, negotiated agreement was in the State's best interest, and therefore, waived competitive bidding. DNR notified the Royalty Board of its intent to waive competitive disposition in October 2021 via an official letter (Exhibit 4). DNR ultimately pursued bilateral negotiations with Petro Star and Marathon in 2021.

A one-year contract with Petro Star was negotiated in 2021, pursuant to AS 38.06.055(b)(1). The contract, which is valid from January 2022 to December 2022, avoids costly interruptions in the delivery of royalty in-kind oil to Petro Star's refineries. There, DNR found that disposition of royalty oil for a term of one year would relieve market conditions under 11 AAC 03.024 (1)–(3) and help to ensure continuous crude

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[27] See below for the calculation of the netback pricing difference between RIK and RIV that is used to generate this additional revenue claim.

[28] See AS 38.05.182(a), AS 38.05.183(d), AS 38.05.183(a).

[29] See https://aws.state.ak.us/OnlinePublicNotices/Notices/View.aspx?id=203541

oil supply to the refinery. As previously mentioned, the current five-year contract, with a focus on the criteria specified under the terms of AS 38.05.183(e) and AS 38.06.070(a), is entered into because the obligation under 11 AAC 03.026(b) and 11 AAC 03.024 are satisfied, and the State expects to receive a price for its royalty oil in-kind that will be no less than the amount the State would have received, on average, if it elected to keep its royalty in-value. This is mostly because the marine transportation allowance is expected to exceed the RIK differential (see below in Section IV), thus the RIK price is expected to exceed RIV price during the contract term, resulting in additional revenue to the State of Alaska.

DNR believes the State has a duty beyond meeting a minimum necessary threshold when pricing an RIK barrel at least as much as an RIV barrel. This duty is to maximize the benefits of oil production to the citizens of Alaska. As such, DNR believes the RIK differential should not be overly economically burdensome for the refiner and should be competitive enough to support continued and stable in-state refinery operations and allow the refiner to provide a stable source of refined products within the state.

Consistent with his obligations under 11 AAC 03.040 and 11 AAC 03.020, the Preliminary Best Interest Finding served as the Commissioner's formal notification to the Alaska Royalty Oil and Gas Development Advisory Board of the intent to waive competitive bidding in its proposed disposition of royalty oil in kind, and that such disposition is intended to offer the maximum benefits to the citizens of the state.

The Commissioner also considered the criteria listed in AS 38.05.183(e) and AS 38.06.070(a). The Commissioner's analysis of these criteria is discussed in detail in following sections. As outlined in 11 AAC 03.060(a), the RIK contract must be awarded to the prospective buyer whose proposal offers maximum benefit to the citizens of the State.

Consistent with the obligations under AS 38.06.050(a), the Commissioner submitted the Preliminary Best Interest Finding to the Alaska Royalty Oil and Gas Development Advisory Board for its review. Notice of the publication of the Preliminary Best Interest Finding and an invitation for public comment appeared in several newspapers including Anchorage Daily News and Petroleum News (Exhibit 5). A copy of the Preliminary Best Interest Finding and the proposed RIK contracts, as well as this BIF, are made available from the State by contacting:

Division of Oil and Gas
Attn: Commercial Section Manager
550 W. 7th Ave, Suite 1100
Anchorage, Alaska 99501

and it will also be published on the Division of Oil and Gas website at:

http://dog.dnr.alaska.gov/

A copy of the proposed RIK oil sale contract, the State's informal letter of solicitation, the responses to the solicitation letter, the letter sent to the Royalty Board regarding non-competitive disposition, and notice of the publication of the Preliminary Best Interest Finding and invitation for public comment are attached as exhibits to this Final Best Interest Finding and Determination.

III. Discussion of Contract Terms

A. Price

The pricing strategy in the proposed sale is meant to arrive at a value for the State's royalty oil resembling the market value of a barrel of oil sold in the state, at the point where ownership is transferred to Petro Star. To determine the monetary consideration that the State receives for its royalty oil, the proposed sale uses a netback valuation methodology. The RIK netback value in the proposed sale is meant to represent the market value of ANS sold in the state as it enters the TAPS or the regulated pipelines upstream of TAPS Pump Station 1.

Each element of the RIK netback value is discussed in greater detail below, but succinctly, there are five key elements to the netback value. The netback value begins by determining the value of royalty oil where the overwhelming majority of ANS is sold—the USWC. To account for the difference in-value associated with transactions on the USWC versus Valdez, a location differential is subtracted (netted) out. We call this the RIK differential. Next, to account for the pipeline tariffs to ship royalty oil between the point of delivery on the North Slope and the Valdez Marine Terminal, pipeline tariffs are deducted. Fourth, an adjustment is made for the difference in quality between the royalty oil from the field in which the oil originated and the quality of the TAPS common stream received by the buyer. Finally, an adjustment is made to account for the value impact caused by the relatively small difference in the metered volume of oil put into the pipeline at TAPS Pump Station 1 and the metered volume of oil delivered to Valdez Marine Terminal. The per-barrel monetary consideration received by the state is represented formulaically as:

$$\begin{matrix} RIK \\ Netback\ Price \end{matrix} = \begin{matrix} ANS \\ Spot\ Price \end{matrix} - \begin{matrix} RIK \\ Differential \end{matrix} - \begin{matrix} Tariff \\ Allowance \end{matrix} \pm \begin{matrix} Quality\ Bank \\ Adjustment \end{matrix} - \begin{matrix} Line \\ Loss \end{matrix}$$

$$\begin{matrix} RIK \\ Netback\ Price \end{matrix} = \begin{matrix} ANS \\ Spot\ Price \end{matrix} - [\$2.25] - \begin{matrix} Tariff \\ Allowance \end{matrix} \pm \begin{matrix} Quality\ Bank \\ Adjustment \end{matrix} - \begin{matrix} Line \\ Loss \end{matrix}$$

1. ANS Spot Price

Just like the Petro Star 2016, 2017, and 2021 contracts, the proposed RIK contract defines "ANS Spot Price" as the monthly average of the daily high and low assessments for the month for ANS traded at the USWC as reported by Platts Oilgram Price Report and Reuters online data reporting service. The 2021 Marathon one year contract details a similar treatment of the ANS Spot Price. The average of Platts and Reuters also forms the basis for the prevailing value calculation used by Alaska's Department of Revenue (15 AAC 55.171 (m)).

If DNR or Petro Star determines the true market value of ANS at the USWC is no longer accurately reflected by the monthly average of the Platts and Reuters daily mid-point assessment, then a good faith effort will be made to arrive at a mutually agreeable alternative source to establish the ANS Spot Price. If such a mutually agreeable alternative source cannot be identified, "the State will select the alternative source that most reliably represents the price for ANS." The ANS Spot Price calculation does not include days in which either of the two reporting services does not assess the value of ANS on the USWC.

2. $2.25 ("RIK Differential")

As described previously, the State intends to use the currently proposed $2.25 per barrel RIK differential mainly for two purposes. First, this value of the RIK differential will be used to satisfy the statutory condition for disposing of the State's royalty oil in-kind: that the RIK price will be at least as much as the weighted average RIV price. While simple in statement, achieving this standard is challenging due to the way lessees report the RIV price. The RIV valuation methodology, i.e., the final value of the State's RIV, is defined by the lease contract provisions and the many RSAs further refining these provisions. In some cases, the price received by the State for RIV is not known until the lessees' royalty filings are audited several years after the initial filing, and when the lessees refile their royalty reports. Thus, to satisfy its mandate, the State must choose a price term when selling its RIK that either directly references the volume-weighted average price of RIV subject to retroactive adjustment when the lessees refile, or anticipate the monthly differences between the reported and final price of RIV. As stated previously, and described in more detail in Section IV below, the DNR believes the expected RIK price will be higher using the proposed RIK differential, than the expected RIK price resulting from the use of a proposed relatively small premium over the final weighted average RIV price.

In its projection for ANS royalty oil available to take in-kind for the period 2023-2027, DNR expects approximately 75 percent of that royalty oil will come from leases to which the terms of the different RSAs are applied. In other words, if DNR decided to take all its expected royalty in-value, the valuation of three out of every four barrels will use the marine transportation allowance as prescribed by the applicable RSA as a component of the netback pricing formula. In calculating their royalty obligation, the producers are allowed to deduct either their actual and reasonable costs, or a formula-calculated proxy of their costs of transporting the State's RIV from the port of Valdez to the USWC. In attempting to achieve the RIK price superiority over RIV as required by statute for any projected royalty barrel to be taken in-kind from those leases subject to the RSAs terms and holding the other elements of the netback pricing formula constant, DNR will have to compare the currently proposed value of the RIK differential to the *expected* weighted average marine transportation allowance.

DNR believes the average cost to physically transport a barrel of ANS oil from the port of Valdez to the USWC will remain the same compared to the recent levels due to the expected near-term stability of ANS oil production through mid-2023, and the consequent relatively stable volumes of ANS oil carried by tankers[30]. Yet, DNR also expects this average transportation cost would decrease due to projected increases in AK North Slope production, expected to increase about 5% between end of 2023 and 2027, the majority of the duration of this contract.[31]

The total marine transportation cost includes both fixed and variable costs. Variable marine transportation costs are those expenditures directly related to and dependent on the carried volume of ANS oil. On the other hand, fixed marine transportation costs are the expenditures that do not vary with the carried volume of ANS oil. Fixed costs make up a large portion of the marine transportation allowance, and include the expenses associated with fleet depreciation, return on capital, minimum staffing requirements, maintenance and repairs, and overhead. These costs in the short run are unaffected by the total volume of crude oil transported. If tankers carry lower volumes of ANS oil, the fixed nature of many costs made the *average* marine transportation cost (the total marine transportation cost divided by the total barrels of ANS oil carried) rise. Although ANS oil production is expected to increase by around 5% during the five-year contract period, thereby potentially decreasing the average marine transportation costs, this effect is expected to be countered with a potential increase in the total marine transportation costs. While the variable cost components of this total costs are harder to estimate (for example, the cost of fuel oil per barrel shares some of the volatility as the crude oil price), DNR expects that as the fleet ages and more

[30] Here the assumption is that the fleet of tankers used to transport the oil from the NS has been unchanged in the last few years, expected to be unchanged in the near term, and that these tankers will have enough capacity to transport the oil produced.

[31] Please see 2021 Fall RSB, Chapter 6, page 47.

maintenance is required, total marine transportation costs are unlikely to decline significantly, during the life of the contract.

As reflected in the description above, from 2023 to end of 2027, DNR expects that either the marine transportation allowance will remain fairly stable, or that it would be marginally rising. DNR also considered the case when marine transportation allowance could potentially marginally fall. The RIK differential of $2.25 that is agreed upon was negotiated so as to have a very high probability of overcoming a marginally falling average marine transportation cost component. As discussed below, the gap between RIK differential and the RIV marine transportation allowance is what has primarily driven the netback price difference between RIK and RIV historically, and DNR expects this to be the case in the period of this contract as well.

The second purpose of using the proposed RIK differential of $2.25 per barrel of royalty oil is to resemble the expected market value of the location differential that will be used for oil sold in the state. In pricing the oil sold in the state, the producer and buyer agree on a location differential with respect to the spot price of ANS oil sold in the USWC. Since oil sold to in-state refineries in Alaska is not transported to the West Coast, this differential need not equal the average cost of physically transporting oil to the West Coast. For a refinery having access to non-Alaskan crude, its alternative to ANS oil[32] would be the cost of the non-Alaskan crude spot price plus the cost to transport it to Alaska. Thus, in demanding ANS oil, this type of in-state refinery would demand a price equal to or less than its non-Alaskan-crude alternative. In turn, for an ANS producer capable of transporting that crude to the USWC, the maximum discount to the UWSC price this producer would offer is the marine transportation cost to the USWC. Therefore, the actual values from these negotiated contracts, in which the State is not a party, are bounded by these values, differ considerably, and depend mainly on the flexibility of the volumes sold, the length of the contract, and the market power exercised by each party. Even if oil is sold to tanker owners, those owners will benefit from purchasing oil at a lower location differential if the marginal cost of transporting that oil is even less. If ANS production declines or remains stable at a relatively lower level, a fleet built to transport a larger volume has increasing excess capacity. The marginal cost of transporting barrels decreases, and the incentive to purchase smaller producers' barrels to fill those tankers increases. In-state refineries will have to compete with West Coast refineries for increasingly scarce ANS. Actual location differential discounts illustrate that Alaska has its own oil market dynamics.

As stated previously, the State should weigh the duty to maximize the value of its resources against charging too onerous a price to an in-state refiner. This weighting requires more than just ensuring the RIK price be at least as much as the expected weighted average RIV price. Since the State seeks to maximize the benefits of oil production to the citizens of Alaska, DNR sought an RIK differential approximating the location differential used for other in-state sales of oil. This will also increase the resulting price difference (or premium) of RIK over RIV.

The use of a price structure that does not directly reference RIV evolved from both FHR and Tesoro's aversion to retroactive adjustment. Except for FHR's past two RIK contracts, the Tesoro 2014 and 2016 contracts, and the Petro Star 2016 contract, most past RIK sale agreements contained price provisions allowing DNR to retroactively adjust the price of royalty oil when the lessees filed their final RIV value. Such retroactive adjustments complicated the refineries' ability to price refined products when they were sold. To overcome this, Petro Star in 2016 sought contract provisions that, to the extent possible, circumscribed the ability of DNR to adjust prices for oil already delivered. This contract includes an RIK differential that enabled the DNR and Petro Star to agree to limit such retroactivity to changes caused by

[32] Assuming that Cook Inlet oil is not large enough to meet the in-state refinery's total demand for crude.

FERC action while satisfying the State's objective to obtain more revenue than if royalty were taken in-value. Petro Star, through this contract, has expressed a similar preference.

3. Tariff Allowance

The Tariff Allowance provides an additional deduction from the ANS Spot Price equal to sum of the ownership-weighted average minimum interstate TAPS tariff filed with the FERC, plus any tariffs paid by Petro Star for shipment of royalty oil on pipelines from fields (units) on the North Slope upstream of Pump Station 1. Under the proposed contract, DNR has the option of providing royalty oil from any ANS unit[33], and the additional allowance for tariffs paid on pipelines upstream of TAPS Pump Station 1 is intended to match a similar deduction taken by the lessees on RIV from those units. Because Petro Star is allowed a deduction that would reimburse them for the cost incurred to ship oil from the units upstream of TAPS Pump Station 1, DNR has the freedom to maximize value by judiciously nominating royalty oil from different combinations of North Slope units.[34]

The Tariff Allowance is one of the elements of the price term in the proposed contract subject to retroactive adjustments, limited to 8 years. The Tariff Allowance may be adjusted if the tariff used in the calculation of the Tariff Allowance is changed (or subject to a refund order) by FERC later.

4. Quality Bank Adjustment

The Quality Bank Adjustment is a positive or negative number reflecting the value of different streams of crude oil shipped in TAPS. The Quality Bank is administered by the owners of TAPS and regulated by the FERC. Oil tendered for shipment at TAPS Pump Station 1 is produced from several different production units and the shippers of oil of lesser value must reimburse the shippers of oil of greater value for the degradation of value of the comingled stream—the value the shippers receive when they sell the oil. Similarly, the refineries in North Pole and Valdez also take oil out of TAPS, extract the valuable components of the oil in manufacturing petroleum products, and re-inject into the pipeline a mixture of lower valued components. The return streams from the refineries bear a quality bank payment to each of the owners of the passing TAPS stream.

The Quality Bank Adjustment in the proposed contract is calculated as the difference of the value of royalty oil where it is tendered at the point of sale—either at TAPS Pump Station 1 or at the entry into a pipeline upstream of TAPS Pump Station 1—and the value of the oil in TAPS downstream of the Petro Star Valdez refinery. The proposed contract provides an example for how the Quality Bank Allowance is calculated for RIK oil produced at Lisburne. The Quality Bank Allowance is another element of the price term in the proposed contract that is subject to retroactive adjustments, limited to 8 years. DNR may readjust the Quality Bank Allowance if the Quality Bank administrator recalculates any of the values used in the calculation of the Quality Bank Allowance.

5. Line Loss

Line loss is a per barrel amount calculated as:

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[33] Unit is a term defined in regulation (11 AAC 83.395) as "a group of leases covering all or part of one or more potential hydrocarbon accumulations, or all or part of one or more adjacent or vertically separate oil or gas reservoirs, which are subject to a unit agreement." In common use, the term "unit" may sometimes be equated to the term "field."

[34] This capability provides further assurance that DNR will achieve its statutory and regulatory obligation to secure a price for RIK that is at least equal to the volume weighted average of RIV. See also Section III.C. below.

$$(0.0009) \times (ANS\ Spot\ Price - \$2.25 - Tariff\ Allowance \pm Quality\ Bank\ Adjustment)$$

The line loss provision accommodates the impact on value caused by the small difference between the metered volume delivered into TAPS at Pump Station 1 and the metered volume delivered to the Valdez Marine Terminal.

B. Quantity

DNR seeks to sell a variable quantity of royalty oil in-kind through the life of the proposed five-year contract: in the first two years there will be a fixed sale of 12,500 bpd, followed by a range between 10,000 bpd to 12,500 bpd of royalty oil in-kind in the last three years of the contract, with no option to extend this contract. As discussed above, the maximum volume of oil sold under the proposed sale is set such that it is highly likely the State will be able to fulfill its quantity obligations. If Petro Star nominates the full amount under the proposed contract term, this will represent approximately between 18% and 21% of the State's total forecast bpd volume of North Slope royalty oil for 2023-2027[35]. However, DNR reserves the right, at the Commissioner's discretion, to limit the quantity of oil sold in the proposed sale such that the total royalty oil committed under all RIK contracts is not more than 95% of the total monthly North Slope royalty oil.

On the supply side, the number of barrels of royalty oil disposed of under this contract is limited by the State's agreements with its lessees – the State's ability to nominate royalty oil is bound by production and the Commissioner's discretion to nominate no more than 95% of total monthly North Slope royalty oil under all its RIK contracts.

Although in the current proposed contract the buyer does not retain the ability to temporarily reduce nominations below the above specified amount to manage for planned refinery turnarounds—extensive and routine maintenance projects that could temporarily shut-in production, they do possess a provision to reduce their nominations to zero barrels for up to two consecutive months, and (2) reduce the nominations below the established range only under a Force Majeure event. If Petro Star fails to nominate or nominates zero barrels for three consecutive months, then the contract terminates. Thus, Petro Star can use this mechanism to terminate the contract and pursue alternative crude supply agreements.

C. General Discussion of Price and Quantity Terms

Overall, the price and quantity terms in the proposed contract offer attractive terms for Petro Star while also fulfilling the State's objectives. As discussed above, DNR has a statutory and regulatory duty to ensure RIK generates revenue at least as great as what would have been realized for the average barrel of RIV. As explained previously, DNR's analysis indicates the proposed contract will meet this standard. Additionally, DNR has a statutory duty to maximize the benefits from oil production for the citizens of Alaska. As discussed in detail in Section IV. A., DNR believes the expected RIK price obtained through the proposed RIK differential will be greater than the weighted average RIV price over the period of the contract.

The proposed contract also allows the realization of additional revenues by preserving DNR's ability to arbitrage its royalty take. While for the purposes of exposition this document has treated all RIV barrels as fully substitutable, this is not entirely correct. Stemming from variations in the calculation of royalty value across producers, the RIV price that would have been realized from a barrel of royalty oil varies

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[35] As stated above, the forecasted royalty volumes consider future production from currently producing, under development, and under evaluation fields based on the latest 2021 Fall DNR Production Forecast.

across producers. The per-barrel pricing structure outlined in this Section aims to generate a price that is, in expectation, at least equal to the volume-weighted average RIV price. However, under the proposed contract, DNR may choose to nominate RIK barrels from areas that would have yielded the lowest RIV price, which will necessarily be less than the volume-weighted average value. The difference between the RIK and RIV amount is additional revenue to the state that is preserved under the proposed contract.

Finally, it is also worth noting that while it is the State's expectation that each barrel of RIK oil will be sold for more than its RIV amount, the price may not necessarily match its market value. As has been discussed, under the terms of the proposed contract the State offers Petro Star fixed quantity terms, as well as supply and price certainty. Petro Star's continued nomination of RIK under the existing contract, and its willingness to enter into the proposed contract modeled after the existing contract in place, is prima facie evidence that the terms offered by the State are no more onerous than those the buyer could have negotiated in the marketplace.

D. Other Contract Terms of Interest

1. Contract length

In its informal solicitation of interest, DNR sought to gauge potential demand for ANS royalty oil. In past RIK contracts, such as the FHR 2004, DNR entered into long-term agreements lasting ten years. Back then, the expected ANS royalty volumes were large enough to easily meet in-state refinery demand. However, given the observed and expected decline of ANS production over the longer term, and the consequent decline in ANS royalty oil available to take in-kind, the possible overestimation of the projected volumes will imperil DNR's ability to fulfill its volumetric commitments to the buyers of RIK. Prior to this contract, DNR changed the maximum contract length to five years to reduce the risk that overestimating the State's royalty oil will require prorated deliveries to the RIK buyer. The current proposed contract is for a five-year duration because the full Royalty Board was installed within sufficient time to submit the RIK contract during the 32nd Legislative Session.

2. Force Majeure

DNR will, to the best of its abilities under its agreements with its lessees, accommodate a temporary reduction in the volume of RIK oil delivered to Petro Star if the reduction is necessitated by a Force Majeure event. The volume of royalty oil will be reduced by an amount equal to the reduction in Petro Star's requirements that is a direct result of the Force Majeure event. Petro Star will, however, accept delivery of all royalty oil nominated by the State under the proposed contract. Importantly, changes in commercial or financial markets impacting the price of crude or refined petroleum do not constitute Force Majeure events. Thus, volumes cannot be altered, and performance of other contract provisions cannot be suspended, due to changes in market conditions. In fact, Petro Star has an absolute obligation to pay the State any amounts due, per the contract.

3. Retroactivity

The key terms in the proposed contract subject to retroactive adjustments are the terms addressing the pipeline tariff allowance and the quality bank adjustment. If a tariff which has been used in the calculation of a Tariff Allowance is changed or subject to a refund order by the FERC, the Tariff Allowance will be recalculated using the changed FERC-ordered tariff, and the royalty oil price will be retroactively readjusted accordingly, but any such retroactive change will be limited to a period of 8 years. Similarly, if the stream values used in the calculation of the Quality Bank Adjustment is recalculated by the Quality Bank administrator, the Quality Bank Adjustment will be recalculated, and royalty oil price will be retroactively readjusted accordingly, also limited to a period of 8 years. DNR was able to retain these two retroactive adjustments to help ensure RIK-RIV price parity was achieved.

4. Security

When the State enters into a sale of RIK oil, the State is exposed to the risk that the buyer will default on its obligations to pay for the royalty oil delivered to, and nominated on the behalf of, Petro Star. There are two key elements of the “default risk” to which the state is exposed in an RIK sale. The first element is the total loss from royalty oil already delivered to Petro Star; the second is the so-called “denomination” risk. Under the proposed contract, DNR would be unaware of the buyer’s inability, or unwillingness, to pay for oil already delivered for up to 26 calendar days after the final delivery of the month. An immediate move on DNR’s part to declare the contract in default would likely require up to another seven calendar days. Thus, the State could deliver up to 65 calendar days of royalty oil before it could declare the buyer in default (31 days of delivery, 20 calendar days to bill, six calendar days for payment, and seven calendar days to declare default). The revenue from these 65 days of royalty oil would, in the absence of security or litigation, be a total loss.

In addition to this total loss, the State is also exposed to the losses that would likely stem from a distressed sale of previously nominated royalty oil – the “denomination risk.” To fulfill its obligations under the proposed contract, the DNR must alert upstream producers of its intent to take RIK at least ninety days ahead of the date of delivery (i.e., it must nominate oil at least ninety days in advance). Thus, should the buyer default, DNR will have nominated an additional 90 days of RIK oil consistent with its obligations under the sale contract. This additional 90 days of royalty oil must be disposed of by the State, likely at distressed prices.

To help insulate the State from the default risk a RIK disposition generates, the State requires either a letter of opinion from a financial analyst approved by the State be submitted to the State each year, or Petro Star provides an annually renewed, continuously maintained stand-by letter of credit or surety bond equal in-value to fifty days of royalty oil. To waive the requirement for a letter of credit, the buyer, or guarantor, must submit to a full review of the financial health of the buyer, or guarantor. If the financial analyst finds the buyer’s, or guarantor’s, long term (and short term, if available) credit rating is likely to fall below, both Standard and Poor’s BBB-, Moody’s Baa3, DBRS’ BBB or KBRA’s BBB- at any time during the next twelve months, then the state will immediately require a one-year irrevocable stand-by letter of credit. In the current contract Petro Star has opted to place a surety bond for the fifty days of royalty oil at their maximum nomination amount for the term of the contract.

5. In-State Processing

Under the proposed contract, Petro Star is compelled to use “commercially reasonable efforts” to manufacture refined petroleum products from the State’s RIK oil in Alaska. While the spirit of this provision is attractive from the State’s perspective, it is unlikely to materially impact the behavior of Petro Star. Petro Star currently sources crude oil from other North Slope suppliers, and the royalty oil sold under this contract is likely to complement or even possibly displace some of these volumes.

6. Employment of Alaskans and Use of Alaska Companies

Petro Star agrees to employ Alaska residents and Alaska companies to the extent they are available, willing, and at least as qualified as other candidates for work performed in Alaska in connection with the proposed sale.

7. Dispute Resolution

If a dispute arises, both parties may avail themselves of the dispute resolution mechanism contained in the proposed contract. The dispute resolution mechanism can be triggered by either the State or Petro Star by giving notice of the dispute to the other party. Within 60 days of providing notice of the dispute, both parties shall submit their arguments and evidence to the Commissioner. After having received the arguments and evidence concerning the dispute from the parties, the Commissioner shall adjudicate the dispute. Both the State and Petro Star agree to abide by the findings of the Commissioner provided the decision is "supported by substantial evidence in light of the whole record."

8. Proration

Under the terms of the proposed contract, the State reserves the right to prorate royalty oil nominated for taking in-kind. If DNR is unable to supply the total volume of oil nominated by Petro Star and all other future RIK purchasers, DNR has reserved the right to prorate the nominated volumes of such future RIK purchasers equally, in proportion to their nominations. As indicated before, DNR reserves the right to limit the total quantity of oil sold under all RIK contracts to 95% of the total monthly North Slope royalty oil.

IV. Analysis of State Benefits

A. Cash Value Offered – AS 38.05.183(e)(1)

As described in Section III.A.2, under the terms of the proposed RIK contract, the State estimates it will receive a price for its RIK oil that will be greater than the price it would have received if it elected to keep its royalty oil in-value. This is due mainly to the difference between the proposed value of the RIK differential and the expected value of the marine transportation allowance to be used in the valuation of the vast majority of the forecasted ANS royalty volume. DNR believes this difference is attained when the value of the RIK differential approximates the expected market value of the location differential used for in-state sales of ANS oil.

However, the RIK differential deduction and the marine transportation allowance represent only one component in the netback pricing formulas of RIK and RIV, respectively. The remaining components of those formulas (namely, the destination value, pipeline tariff deductions, line loss deductions and quality bank adjustments) also play a role in pricing RIK and RIV, especially since the valuation methodologies used in RIV are not necessarily equal to those used in RIK. In that sense, it is theoretically possible the values of those remaining components may reduce some, if not all, of the initial price superiority of RIK over RIV, which is mainly obtained through the difference between the proposed RIK differential and the expected marine transportation allowance.

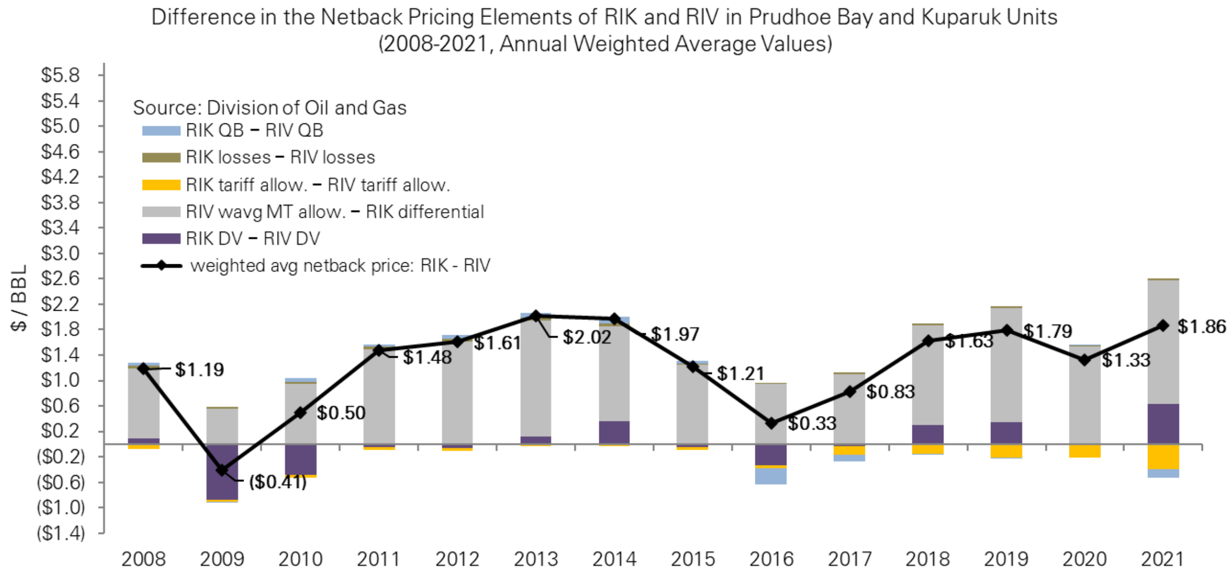
In the period from January 2008 to December 2021, the RIK differential was indeed the major contributor to the price superiority of RIK versus RIV. Figure 10 below shows the weighted average difference of each of the netback pricing elements between RIK and RIV for the period of analysis for the royalty volumes in the Prudhoe Bay and Kuparuk River Units. The Prudhoe Bay and Kuparuk River Units represent more than 90 percent of total RIK barrels taken by the State. This graph displays the largest positive values for the difference between the RIK differential and the marine transportation allowance, meaning that the deduction resulting from the former for RIK was smaller than that for RIV valuation using the latter. Assuming that the other netback pricing elements are equal, this positive difference translates into a higher netback price for each RIK barrel than for each RIV barrel.

Figure 10 further shows that the differences in values of the other components (destination value, quality bank adjustments, tariff allowance, and line losses) in the RIK versus RIV formulas enhanced the initial advantage obtained through the RIK differential in some years, but also reduced it in others. This is particularly significant in the case of the destination value; that is, the reported price of ANS in the USWC. For example, in the years 2009-2012, Figure 10 shows that the RIK destination value was (on an annual average basis) lower than its RIV counterpart, thereby generating negative values in the graph. In other words, the valuation of the ANS crude at the UWSC contemplated in the previous RIK contracts was lower in those three years than the valuation dictated by the RSA terms. On an annual average basis, in 2009, this negative difference was large enough to negate the advantages obtained from the other netback pricing elements, especially the RIK differential. In this way, the resulting RIK netback price for 2009 was lower than the RIV netback price by $0.23 per each royalty barrel. In Figure 9, from January 2009 to February 2011, the different assessments of ANS at the USWC for each RIK and RIV barrel were large enough, in favor of RIV, that for 10 months during this sub-period the resulting RIK netback price was actually lower than its RIV counterpart. This phenomenon arose from the different ways that the destination values are calculated for each RIK and RIV barrel. In recent contracts, the destination value is the monthly average of the daily average ANS price assessments reported by Reuters and Platts[36]. In turn, the calculation of the destination value for the great majority of royalty oil taken in-value[37] follows the methodologies prescribed in the various RSAs. In particular, BP uses only the ANS USWC price assessment reported in Platts. ConocoPhillips uses an average of the ANS USWC price assessment reported by Platts and Reuters. ExxonMobil uses a market basket of crude values—including Brent, WTS, LLS, ANS, WTI, Isthmus (a Mexican crude), and Line 63 (a California crude)—as reported by Platts. The ExxonMobil market basket is constrained to be no greater than the Platts reported ANS USWC value plus fifty cents and no less than Platts reported ANS USWC value minus fifty cents. In sum, the RIV volume weighted average destination value is driven more strongly by Platts reporting than the destination value in the proposed RIK contracts.

[36] The RIK contract with FHR that started in 2004 and ended in March 2014 used the average of the ANS spot price reported values of Reuters, Platts, and Telerate. However, once Telerate stopped providing this information, the destination value was calculated using the values from the other two firms.

[37] As stated previously, during this 97-month period, royalty taken in-kind came primarily (98.93%) from leases to which the terms of the RSAs were used. In fact, since September 2010, this percentage has been at least 99.8%. As a result, the most relevant comparison of the value of RIK is with respect to the value of RIV from those leases to which the RSAs terms were used.

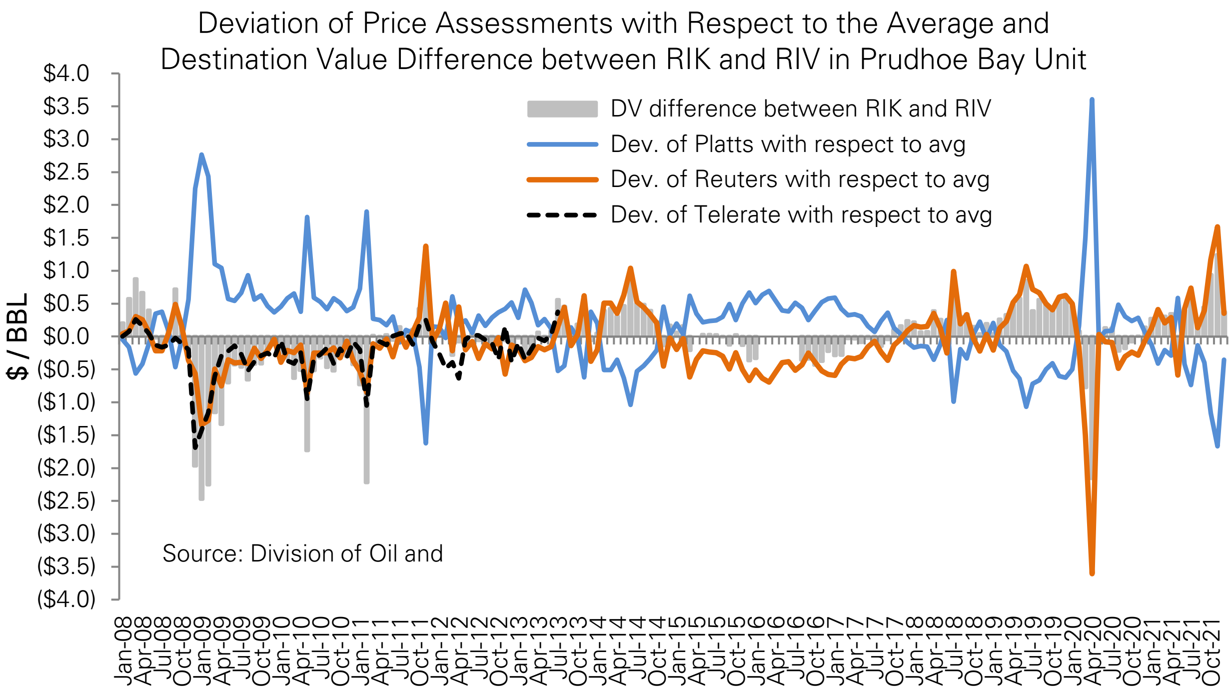
Figure 10. Difference in the netback pricing elements of RIK and RIV



Source: Department of Natural Resources, Division of Oil and Gas

Figure 11 below presents the monthly deviations of the price assessments reported by Platts, Reuters, and Telerate with respect to their monthly average in comparison with the monthly difference in the destination values between RIK and RIV. Over the period January 2008 to December 2021, the price assessments of such reporting firms vary in both directions with respect to the average. In other words, except for the period October 2008 to July 2011, there is not a consistent or lasting difference in the reported values of one firm with respect to the others. From October 2008 to July 2011, Platts consistently reported higher ANS values than Reuters and Telerate. As stated previously, since most of the RIV destination value is driven by Platts, this resulted in an RIV destination value higher than RIK. However, from August 2011 to October 2015, this difference was no longer observed, and also the deviations became less pronounced. Generally, even when variation in the price assessments reported by Platts and Reuters, as the one observed from October 2008 to July 2011, is still possible during the combined duration of the two proposed RIK contracts with Petro Star and Marathon, the value of the RIK differential is expected to counteract any negative impact of such differences in assessments. Moreover, even if this turns out to be insufficient to guarantee the price superiority of RIK over RIV, the proposed contracts contemplate the modification of the destination value calculation to better reflect the price of ANS at the USWC.

Figure 11. Deviation of price assessments with respect to the average destination value difference between RIK and RIV in Prudhoe Bay Unit



Source: Department of Natural Resources, Division of Oil and Gas

With respect to the average annual values of the other components of the netback pricing formulas observed in Figure 10, that graph shows that although the deduction resulting from the tariff allowance used in the RIK valuation was mostly greater than its equivalent for RIV, as indicated by the negative values, they were negligible. Similarly, in terms of the quality bank adjustments and line losses, although mostly positive, these differences were also negligible.

Since DNR expects to achieve netback price superiority of RIK over RIV through the proposed RIK differential during the period 2023 to 2027, it can ensure the highest possible revenue through the sale of the State's royalty oil in-kind instead of choosing the RIV option. Maximizing cash value is consistent with the State's obligations as mandated in 11 AAC 03.026 and 11 AAC 03.024. Under the proposed five-year contract, the State would supply the North Pole and Valdez refineries with 12,500 bpd in the first two years, followed by a range between 10,000 bpd to 12,500 bpd of North Slope royalty crude oil in the last three years of the contract. If this full volume of RIK oil is nominated, delivered, and received, then the total annual volume of RIK oil under the contract will be between 20.1 million and 22.8 million barrels.

The RSA-based, volume weighted, marine transportation allowance has typically ranged from $3.00 to $3.50 per barrel during the years 2011 through 2021. The RIK differential is $2.25 for the proposed RIK contract with Petro Star. As such, if the trend of the marine allowance continues to lie in the same range during the term of the proposed contract, then the difference between the RIK differential and marine allowance during the term of the contract can be estimated to be approximately $1.00 per barrel. The average erosion of premium resulting from the other netback pricing elements (other than the difference between the RIK differential and the marine transportation allowance) was 14%, during the period from 2008 to 2021. Therefore, assuming a total RIK nomination volume of 20.1 million barrels during the term of the contract, and assuming a $1.00 per barrel premium due to the RIK differential, and a 14%

erosion factor due to other netback pricing elements, the expected incremental revenue to the State from the proposed contract can be estimated to be $17.4 million. Applying the same assumptions to RIK nomination volumes of 22.8 million barrels during the term of the contract, the estimated incremental revenue to the State is $19.7 million.

B. Projected Effect of the Sale on the Economy of the State – AS 38.05.183(e)(2)

The proposed sale will provide the State, during the course of the contract, an estimated $17.4 to $19.7 million in revenue additional to what would have been obtained through the selection of these ANS royalty volumes in-value. The revenue to the State generated by this contract, is estimated to be $1.7 billion to $1.96 billion, based on the ANS price estimates by DOR, net of netback deductions.[38] The sale may also help facilitate the continued operation of the North Pole and Valdez refineries with the economic benefits that accompany such operations.

Petro Star's refineries are 100% staffed with residents in Alaska, and 99% of the entire company is staffed with residents in Alaska. They employ approximately 80 full-time, high paying positions at their refineries and approximately 275 positions companywide. Petro Star also generates labor demand and satisfies the need of multiple local consumption and labor markets through its North Pacific Fuel and Sourdough Fuel subsidiaries, operating gas stations and convenience stores throughout the State, providing the marine industry with petroleum products and dockside services, and distributing heating oil and diesel, as well as providing supplies of jet fuel to military facilities throughout Alaska.

C. Projected Benefits of Refining or Processing the Oil in Alaska – AS 38.05.183(e)(3)

The proposed sale of royalty oil will help ensure continued in-state processing with its potential price and labor market benefits. As discussed in Section II. D, products from in-state refiners supply a substantial proportion of the state's needs for refined petroleum products. If the absence of the sale of ANS royalty oil to Petro Star generated a decline of the in-state refining capacity, it would have direct, indirect, and induced labor market impacts in Alaska.

D. Ability of Prospective Buyer to Provide Refined Products for Distribution and Sale in the State with Price or Supply Benefits to the Citizens of Alaska – AS 38.05.183(e)(4)

Petro Star's North Pole and Valdez refineries both exclusively refine ANS drawn from TAPS. As was discussed in the previous Petro Star 2021 BIF, Petro Star's North Pole refinery has a maximum throughput capacity of 22,000 barrels per day, while the Valdez refinery has a maximum throughput of 60,000 barrels per day.

Currently, approximately 65% of the refined products produced by Petro Star is jet fuel and the remaining output is ultra-low sulfur diesel, asphalt, and heating oil. Petro Star does not produce gasoline. Jet fuel refined at the Petro Star North Pole refinery is transported to Anchorage via the Alaska Railroad while the fuel produced at the Petro Star Valdez refinery is delivered to Anchorage via barge. The majority of Petro Star's refined products are consumed in Alaska. On rare occasions Petro Star will evaluate contract opportunities to sell fuel to Canada and the Pacific Northwest. Although Petro Star does not audit where all of their sold products end up being consumed, they estimate that 99% of the products were consumed

[38] This estimate is based on the historic average netback deduction difference between RIK and RIV being around $1 in favor of RIK, and multiplied ANS forecasted prices minus this total netback deduction (around $8.00 per barrel), and by RIK total volumes for low and high nominations during the term of the contract. For ANSWC prices, see RSB Spring 2022, Appendix B-2, page 18, http://www.tax.alaska.gov/programs/sourcebook/index.aspx

in Alaska in 2021.[39] Petro Star operates ten retail fuel stations under its Sourdough Fuel and North Pacific Fuel divisions. Of those stations, one is located in Dutch Harbor, two are in Kodiak, while the rest are located in the Fairbanks/North Pole area.

E. Existence and Extent of Present and Projected Local and Regional Needs for Oil and Gas Products – AS 38.06.070(a)(2)

In 2019, on a per capita basis, Alaskans paid the second highest prices for energy compared to residents of any other state[40]. This high expenditure rate was driven in large part by the very high per unit cost paid by Alaskans for energy. Most pertinent for current purposes, Alaskans paid the second highest rates in the country for gasoline[41], and some of the highest rates in the nation for distillate fuels including diesel and home heating fuel. The fact that Petro Star is willing to enter into this RIK contract reveals the commercial appeal of the proposed terms. However, any potential benefit obtained by Petro Star through this contract will not necessarily materialize into lower product prices for Alaskan consumers, especially considering the market structure for refined products in Alaska. Thus, it is not likely the proposed sale will materially reduce the price paid by Alaskan consumers for refined petroleum products.

F. Revenue Needs and Projected Fiscal Condition of the State – AS 38.06.070(a)(1)

The current and projected fiscal condition of the State has been discussed above in Section II. E. To summarize, in 2020, approximately one out of every twenty dollars of value in total goods and services produced in Alaska was generated by oil and gas. Revenues from the oil and gas sector are projected to represent approximately 53% of the Unrestricted General Fund Revenue for FY 2023, with oil and gas royalty's contribution to the Unrestricted General Fund Revenue remaining steady at between 16% to 17% for the next six fiscal years.[42]

The sale of royalty oil under the proposed contract is projected to generate an estimated $17.4 to $19.7 million in revenue, additional to what would have been obtained through the selection of these ANS royalty volumes in-value. The proposed sale may further improve the State's fiscal picture by generating increased revenue if the State selects RIK volumes from the leases with below-average RIV price. The proposed sale will improve the State's revenue picture.

G. Desirability of Localized Capital Investment, Increased Payroll, Secondary Development and Other Possible Effects of the Sale – AS 38.06.070(a)(3)

The proposed sale of RIK will, in and of itself, require no additional capital investment, induce no change in payroll, yield no secondary development and have few other consequences. During negotiations, Petro Star indicated the North Slope royalty oil transacted under the proposed sale will be used in a status-quo fashion. Royalty oil sold under the proposed contract will not cause significant changes to the current overall feedstock sourcing for Petro Star's refinery operations, although Petro Star indicated that they expanded their refinery operations since the last BIF. Petro Star also believes the royalty oil sold under this contract is unlikely to materially impact refinery operations. As such, no long-run population

[39] Based on recent, non-confidential, Petro Star responses provided to aid writing this BIF.

[40] See https://www.eia.gov/state/rankings/#/series/225

[41] See https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_sum/html/rank_pr_mg.html&sid=US

[42] DOR RSB, Spring 2022, Chapter 2, Table 5, page 9. http://www.tax.alaska.gov/programs/sourcebook/index.aspx

redistribution or change in the utilization of social services is expected. The proposed contract is unlikely to induce new hiring.

By charging a price within the market range, DNR will avoid undercutting local, small producers' market positions in Alaska. By taking oil as RIK rather than in-value, large producers will have less oil to transport to the West Coast. This might prompt them to purchase crude on more favorable terms from smaller producers. In addition to in-state refiners, smaller producers also benefit the State through their investment, production, and its attendant economic benefits.

H. Projected Positive and Negative Environmental Effects – AS 38.06.070(a)(7)

The sale of RIK oil will, in and of itself, have no negative environmental effects and will not affect the volume of oil shipped in Alaska. If RIK oil simply replaces oil that would have been purchased from small producers, then there is no environmental impact. If the RIK oil replaces crude that would have been imported from outside of Alaska, and there is a non-zero risk of adverse environmental effect per barrel per mile, then the proposed sale may have a small positive environmental effect. Taken as a whole, the proposed contract is expected to have very little incremental environmental impact.

It should also be noted that the State transfers title and risk for RIK crude to the buyer at the point of delivery.[43] Title and risk for the RIK crude is always transferred upstream of Pump Station 1. This legal construction does not change the volume of oil flowing through TAPS on a given day and does not impact environmental risk. However, it does insulate the State from the financial risk associated with an adverse environmental outcome.

I. Projected Social Impacts – AS 38.06.070(a)(4)

Beyond the direct revenue impact, the proposed sale is unlikely to have any incremental social impact. The royalty oil sold under this contract is unlikely to materially impact refinery operations. As such, no long-run population redistribution or change in the utilization of social services is expected.

J. The Projected Additional Costs and Responsibilities Which Could Be Imposed Upon the State and Affected Political Subdivisions by Development Related to the Transaction – AS 38.06.070(a)(5)

The proposed sale of RIK, in and of itself, is expected to generate negligible additional cost or responsibilities for the State or boroughs. The State's royalty oil is expected to simply displace crude secured from the private market. The proposed contract is unlikely to materially impact the operations of the North Pole or Valdez refineries. However, as was discussed above, when the State sells its RIK, it faces counterparty risk. There exists a non-zero probability that Petro Star could, for a host of reasons, fail to fulfill its obligations under the proposed contract. Such a failure could expose the State to financial loss. The proposed contract recognizes this risk and mitigates it through a security arrangement requiring Petro Star to provide an opinion by an independent financial analyst on the credit rating of Petro Star's guarantor or post a stand-by letter of credit or a surety bond equal to the expected value of fifty days of royalty oil. See Section III.D.4 above.

[43] Put differently, the state instantaneously passes the title and risk of royalty oil from the producer to the buyer at the point of delivery.

K. The Existence of Specific Local or Regional Labor or Consumption Markets or Both Which Should Be Met by the Transaction – AS 38.06.070(a)(6)

The proposed contract is unlikely to induce substantial new hiring. However, refinery operations support multiple local labor and consumption markets. The refinery directly employs more than 80 Alaskans in full-time, well-paying positions directly at the refinery. Petro Star also operates ten retail fuel stations in Alaska under its Sourdough Fuel and North Pacific Fuel divisions.

L. The Projected Effects of the Proposed Transaction upon Existing Private Commercial Enterprise and Patterns of Investment – AS 38.06.070(a)(8)

The proposed contract is unlikely to demonstrably impact the operations at the North Pole or Valdez refineries. As has been mentioned before, the crude supplied under the proposed contract will likely simply displace crude from the private market. As such, the proposed contract is expected to have very little impact on existing private commercial enterprise and patterns of investment. However, the continued operation of the North Pole and Valdez refineries will allow Petro Star to continue to supply its customers, and regional wholesale and retail markets. The continued operation of the North Pole and Valdez refineries will sustain the demand Petro Star generates among its vendors and servicers.

V. **Public Comment**

Under 11 AAC 03.020(c)(2), before the publication of a Final BIF, the Commissioner must engage in a public comment period lasting not less than 30 days. The public comment period on the proposed RIK sale began January 31st, 2022, with the public notice, publication, and dissemination of the Preliminary Best Interest Finding and Determination. The public comment period closed on March 2nd, 2022. There were no comments received by DNR.

VI. Final Finding and Determination

A. Disposal of Royalty Oil In-kind is in the State's Best Interest

Following the issuance of the Preliminary Best Interest Finding and Determination, public comment period, and public hearing, review and recommendation of the proposed RIK Oil sale by the Alaska Royalty Oil and Gas Development Advisory Board, the Commissioner has determined that it is in the best interest of the State to take its royalty oil as RIK in order to supply the Petro Star refineries at Valdez and North Pole with feedstock. In accordance with AS 38.05.182(a), 11 AAC 03.010(b) and (d), 11 AAC 03.020(c), and 11 AAC 03.060, DNR is publishing this Final Best Interest Finding and Determination to that effect.

B. Competitive Bidding is Waived

Consistent with the results of the solicitation described in Section II. F. above and DNR's assessment of the potential benefits of negotiated RIK contracts, the Commissioner has determined, in accordance with AS 38.05.183(a) and 11 AAC 03.030, the best interests of the State will be served through the sale of its RIK to Petro Star under non-competitive procedures.

The proposed contract will protect the State's interest and is estimated to generate a sale price throughout the term of the contract that is expected to be higher than the volume-weighted average of the reported netback prices the lessees file for royalty purposes. The Commissioner further considered that DNR has negotiated a contract that will permit a transparent and equitable allocation of the State's royalty oil across all RIK buyers should the State's volumetric expectations be incorrect.

A copy of this Final Best Interest Finding and Determination is being delivered to the Alaska Royalty Oil and Gas Development Advisory Board as notification under AS 38.05.183(a), 11 AAC 03.010(g), and 11 AAC 03.040.

C. The Proposed RIK Oil Sale Offers Maximum Benefits to the State

When RIK is sold through a process other than competitive bid, the Commissioner shall award the disposal to the prospective buyer whose proposal offers the maximum benefits to the citizens of the State of Alaska. In making the award the Commissioner must consider the criteria set out in AS 38.05.183(e) and in AS 38.06.070(a). The Commissioner's in-depth review and consideration of all the required statutory criteria is set out above in Section IV of this Final Best Interest Finding and Determination. Subject to public review and comment, the Commissioner finds the proposed sale of North Slope royalty oil to Petro Star, under the terms and conditions of the attached proposed contract, offers the maximum benefit to the state.

D. Alaska Royalty Oil and Gas Development Board

The Preliminary Finding and Determination and copies of the proposed contracts were submitted to the Alaska Royalty Oil and Gas Development Board in compliance with AS 38.05.183(c), 11 AAC 03.024, and 11 AAC 03.040, which require the commissioner to give written notice to the board of intent to waive competitive bidding in an RIK sale.

E. Legislative Approval

Legislative approval is required for a RIK oil sale with a term of more than one year pursuant to AS 38.06.055(a), since "In addition to the recommendation by the board required under AS 38.06.050, the commissioner of natural resources may not enter into a sale, exchange, or other disposition of oil or gas or of the rights or waiver of the rights to receive future production of royalty oil or gas under AS 38.05.183 without the prior approval of the legislature. The legislature may approve a sale, exchange, or other disposition of oil or gas or of the rights or of a waiver of the rights to receive future production of royalty oil or gas only by enacting legislation." As such, the Commissioner will be seeking legislative approval subsequent to the written recommendation by the Alaska Royalty Oil and Gas Development Advisory Royalty Board.

F. Applicable Criteria and Weights

For the purposes of the proposed contract, as was outline in Section IV, the Commissioner considered all criteria outlined in AS 38.05.183(e) and AS 38.06.070(a). Subject to public review and comment, the Commissioner finds the proposed sale will positively impact, or affect no harm on, all the criteria in AS 38.05.183(e). In the analysis of the proposed sale, the Commissioner most heavily weighted the cash value offered, the projected effect of the sale on the economy of the state, and the ability of Petro Star to supply refined product to Alaskans. While all criteria in AS 38.05.183(e) received non-zero weight, the other criteria discussed in Section IV received less weight.

VII. Conclusion

The Commissioner is presenting this Final Best Interest Finding and Determination to the public. After careful consideration of the circumstances of the proposed sale, material information, and legal requirements, the Commissioner has determined, in accordance with AS 38.05.183, that the best interest of the State does not require this RIK sale be made by competitive bid, and the proposed contract with Petro Star offers maximum benefits to it citizens.

Corri A. Feige
Commissioner

3/18/22
Date

Cc: Derek Nottingham, Director, Division of Oil and Gas
Justin Black, Deputy Director, Division of Oil and Gas
Haley Paine, Deputy Director, Division of Oil and Gas
Jhonny Meza, Commercial Manager, Division of Oil and Gas
Mary Gramling, Attorney VI, Department of Law
Emily Feenstra, Attorney IV, Department of Law

VIII. Exhibits

Exhibit 1 – Draft "Agreement for the Sale of Royalty Oil between and among the State of Alaska, Petro Star Inc., and Arctic Slope Regional Corporation"

Exhibit 2 – Example "Non-binding Solicitation of Interest"

Exhibit 3 - Informal Solicitation responses regarding the purchase of the State's RIK

Exhibit 4 - Letter to the Royalty Board regarding non-competitive disposition

Exhibit 5 - Notice of the publication of the Preliminary Best Interest Finding and an invitation for public comment

Exhibit 1 – Draft "Agreement for the Sale of Royalty Oil between and among the State of Alaska, Petro Star Inc., and Arctic Slope Regional Corporation"

AGREEMENT FOR THE SALE OF

ROYALTY OIL

BETWEEN AND AMONG THE STATE OF ALASKA,

AND

PETRO STAR INC. AND

ARCTIC SLOPE REGIONAL CORPORATION

April ___, 2022

Contents

Appendixes

AGREEMENT FOR THE SALE AND PURCHASE OF ROYALTY OIL

This Agreement is between the State of Alaska ("the State"), Petro Star Inc. ("the Buyer") and Arctic Slope Regional Corporation ("the Guarantor").

Article 1 – Definitions

As used in this Agreement, the terms listed below shall have the following meanings:

1.1 "Additional Sale Oil" is defined in Section 2.1.2.

1.2 "Affiliate" is defined in Section 21.1.

1.3 "ANS" means the Alaska North Slope.

1.4 "ANS Spot Price" is defined in Section 2.3.

1.5 "Assignee" is defined in Section 21.1.

1.6 "Business Day" means any day, or part of a day, during which federally chartered banks are open for business in the place designated in this Agreement for payment.

1.7 "Commissioner" means the Commissioner of the Alaska Department of Natural Resources or the Commissioner's designee.

1.8 "Day" means a period of twenty-four consecutive hours, beginning at 12:01 a.m., Alaska Standard Time.

1.9 "Day of First Delivery" is defined in Section 2.4.

1.10 "DBRS" means DBRS Inc., a nationally recognized statistical rating organization, a subsidiary of DBRS Limited, and its successors.

1.11 "Excess Royalty Oil" is defined in Section 2.1.2.

1.12 "Financial Analyst" is defined in Section 5.3.

1.13 "FERC" means Federal Energy Regulatory Commission.

1.14 "Force Majeure" is defined in Section 14.2.

1.15 "Initial Term" has the meaning set forth in Section 8.2.

1.16 "KBRA" means Kroll Bond Rating Agency, LLC, a globally recognized full-scale rating organization, and its affiliates.

1.17 "Leases" means the oil and gas leases issued by the State on the Alaska North Slope from which the State takes or may take Royalty Oil in-kind.

1.18 "Lessee" means a person owning a working interest in any of the Leases.

1.19 “Letter of Credit” is defined in Section 6.1.

1.20 “Line Loss” is defined in Section 2.3.

1.21 “Minimum Interstate TAPS Tariff” is defined in Section 2.3.

1.22 “Month” means a period beginning at 12:01 a.m., Alaska Local Time, on the first Day of the calendar Month and ending at 12:01 a.m., Alaska Local Time, on the first Day of the following calendar Month.

1.23 “Moody’s” means Moody’s Investor's Services, Inc., a subsidiary of Moody’s Corporation, and its successors.

1.24 “Notice” means written notice in accordance with Article 15.

1.25 “Notice Effective Date” is defined in Section 15.2.

1.26 “Opinion Letter” is defined in Section 5.3.

1.27 “Parties” means, collectively, the Buyer, the Guarantor, and the State.

1.28 “Party” means the Buyer, the Guarantor, or the State, individually.

1.29 “Person” is defined in AS 01.10.060.

1.30 “Point of Delivery” means the transfer point at which the State receives Royalty Oil in-kind from the Lessees.

1.31 “Price” is defined in Section 2.3.

1.32 “Process” is defined in Section 4.1.

1.33 “PSVR Reference Stream” is the blended TAPS stream immediately downstream from the Petro Star Valdez Refinery.

1.34 “Refinery Turnaround” means a period not to exceed three months when the Buyer, by notice to the State, may reduce the quantity of Sale Oil it nominates and purchases from the State to less than 12,500 barrels per Day in the first two years of the contract, and less than 10,000 barrels per Day in the last three years of the contract, because the Valdez, Alaska refinery or North Pole, Alaska refinery reduce the processing of Sale Oil for the purpose of performing planned or unplanned maintenance, repairs or capital improvements to the refinery.

1.35 “Quality Bank” means a system of calculations administered under the authority of the FERC that accounts for the differences in value between the individual tendered streams and the delivered co-mingled stream of TAPS.

1.36 “Quality Bank Adjustment” is defined in Section 2.3.

1.37 “Rating Agency” means Standard and Poor’s, Moody’s, DBRS, or KBRA.

1.38 “RIK Differential” means per barrel location differential used to determine the price of the Sale

Oil and Additional Sale Oil under Section 2.3 and set at $2.25 for this Agreement.

1.39 "Royalty Oil" means the total volume of crude petroleum oil and other hydrocarbons and associated substances from the Leases, including such substances as crude oil, condensate, natural gas liquids, or return oil from crude oil topping plants, that may be blended with crude oil before the Point of Delivery and tendered as a common stream to the State as Royalty Oil that the State may take in-kind, regardless of whether the State takes the Royalty Oil in-kind.

1.40 "Royalty Settlement Agreement" means any written royalty settlement agreement.

1.41 "Sale Oil" means the oil the State has agreed to sell to the Buyer, and the Buyer has agreed to purchase from the State under this Agreement.

1.42 "Standard and Poor's" means Standard and Poor's, a division of McGraw- Hill Companies, Inc. and its successors.

1.43 "Surety Bond" is defined in Section 6.4.

1.44 "TAPS" means the Trans-Alaska Pipeline System

1.45 "Tariff Allowance" is defined in Section 2.3.

1.46 "Term" is defined in Section 8.2.

1.47 "Unit" has the meaning defined in 11 AAC 83.395.

1.48 "Unit Agreement" means any unit agreement for a Unit from which the State takes or may take Royalty Oil.

Article 2 – Sale and Purchase of Royalty Oil

2.1 **Quantity.**

2.1.1 **Sale Oil Quantity.** The State agrees to sell to the Buyer, and the Buyer agrees to purchase from the State, a Sale Oil quantity based on the following nomination schedule, averaged for the Month of Sale Oil delivery for each year, as nominated by the Buyer in accordance with Sections 2.1.2 through 2.1.6:

Year 1 (Jan 01, 2023-Dec 31, 2023): Fixed Sale Oil quantity of 12,500 barrels per Day

Year 2: (Jan 01, 2024- Dec 31, 2024): Fixed Sale Oil quantity of 12,500 barrels per Day

Year 3: (Jan 01, 2025- Dec 31, 2025): Sale Oil quantity of a maximum of 12,500 barrels per Day and a minimum of 10,000 barrels per Day

Year 4: (Jan 01, 2026- Dec 31, 2026): Sale Oil quantity of a maximum of 12,500 barrels per Day and a minimum of 10,000 barrels per Day

Year 5: (Jan 01, 2027- Dec 31, 2027): Sale Oil quantity of a maximum of 12,500 barrels per Day and a minimum of 10,000 barrels per Day

2.1.2 **Monthly Sale Oil Nomination.** In accordance with Section 2.1.1, the Buyer shall nominate the quantity of Sale Oil for each Month of Sale Oil delivery by giving Notice of the Buyer's Sale Oil nomination. Except when the additional notice provisions of Section 2.1.6 are invoked by Lessees, the Buyer's nomination shall be effective on the first Day of the Month following expiration of a minimum of one hundred Days after the Notice of the Buyer's nomination. The State will make commercially reasonable efforts to nominate, in accordance with applicable Unit Agreements or Leases, percentages of the State's estimated Royalty Oil volume from one or more Units or non-unitized Leases, at the State's discretion, that will equal the Sale Oil quantity nominated by the Buyer each Month of Sale Oil delivery. Notwithstanding the Buyer's Monthly nominations, any time the total commitments for Royalty Oil under all of the State's royalty-in-kind contracts exceed 95 percent of Royalty Oil in a Month, the Buyer agrees that the State may limit its total nomination of Royalty Oil to an amount that does not exceed 95 percent of Royalty Oil in that Month of Sale Oil delivery and may employ the proration provisions as per Section 2.1.3. The Buyer agrees to accept the volume of Royalty Oil delivered in accordance with the State's nomination. See Appendix 1 for an illustration of the State's nomination procedure for Sale Oil nominated from the Prudhoe Bay Unit for July 2014.

The Buyer may choose to nominate in the Notice additional quantities of Royalty Oil defined as Additional Sale Oil. Except when the additional notice provisions of Section 2.1.6 are invoked by Lessees, the Buyer's nomination shall be effective on the first Day of the Month following expiration of a minimum of one hundred Days after the Notice of the Buyer's nomination. If the total commitments for Sale Oil under all of the State's royalty-in-kind contracts fall below 95 percent of estimated Royalty Oil in a Month, with this difference between 95 percent of estimated Royalty Oil in a Month and total commitments for Sale Oil under all of the State's royalty-in-kind contracts defined as Excess Royalty Oil, the State may in its sole discretion nominate fully or partially to satisfy Additional Sale Oil nominations up to the amount of Excess Royalty Oil. The State may nominate for each buyer up to the actual nominated volume of Additional Sale Oil. If total nominations for Additional Sale Oil under all of the State's royalty-in-kind contracts exceed Excess Royalty Oil, the State will allocate Excess Royalty Oil. If any buyer's actual nominated volume of Additional Sale Oil is not more than equal volumes of Excess Royalty Oil available to each buyer nominating Additional Sale Oil for that period determined by dividing the Excess Royalty Oil by the number of nominations for Additional Sale Oil, then that buyer will receive its full nomination. Those buyers, whose Additional Sale Oil nominations are not fully met with the calculated equal volumes of Excess Royalty Oil, will equally split the remaining available volumes up to the amount of actual nominated volume of Additional Sale Oil for each buyer. If there are remaining available volumes of Excess Royalty Oil, they will be allocated to the buyers whose actual nominated volume of Additional Sale Oil has not been satisfied.

The Buyer agrees to accept full or partial volumes of nominated Additional Sale Oil as determined by the State. Notwithstanding the nominations for Additional Sale Oil and acceptance of such by the State, the Buyer acknowledges and agrees that the State may satisfy nominations for Additional Sale Oil only after it satisfies Sale Oil nominations under all of the State's royalty-in-kind contracts. See Appendix 5 for an illustration of the nomination for the Additional Sale Oil.

2.1.3 **Sale Oil Proration.** Notwithstanding Section 2.1.1, the Buyer agrees that for any Month of Sale Oil delivery in which the Buyer and all other buyers of Royalty Oil under all of the State's royalty-in-kind contracts nominate more than 95 percent of the State's Royalty, the State may prorate the Buyer's Sale Oil nomination as well as Sale Oil nomination of the State's other purchasers.

If total Sale Oil nominations under all of the State's royalty-in-kind contracts exceed 95 percent of the Royalty Oil, then the State will nominate for the Buyer a volume of Sale Oil equal to the product of available Royalty Oil multiplied by 0.95 multiplied by the ratio of the Buyer's nomination divided by the sum of all the Buyer's nominations, including the Buyer's nomination. See Appendix 4 for an illustration of the proration process. For the avoidance of doubt, this proration clause does not apply to Additional Sale Oil nomination described in Section 2.1.2.

2.1.4 **The Buyer's Election to Reduce Sale Oil Quantity.**

2.1.4.1 Buyer may elect to reduce the initial Sale Oil quantity by giving Notice. The initial Sale Oil quantity shall remain as stated in Section 2.1.1 for 12 Months after the Day of First Delivery. Notice of a reduction shall be delivered to the State at least six Months before the effective date of the reduction. The Commissioner may approve or deny a request for a reduction in Sale Oil quantity. The reduced maximum quantity shall be 137.5 percent of the reduced minimum quantity. For example, if the reduced minimum quantity is 4,000 barrels per Day, the reduced maximum quantity shall be 5,500 barrels per Day (4,000 times 1.375 = 5,500).

Buyer may elect additional reductions to the Sale Oil quantity following a reduction to the initial Sale Oil quantity. A reduction cannot be effective until at least 12 Months after the effective date of the most recent reduction in quantity. Notice of an additional reduction under this paragraph (a) shall be delivered to the State at least six Months before the effective date of the additional reduction. The reduced maximum quantity shall be 137.5 percent of the reduced minimum quantity.

2.1.4.2 The Buyer may elect to reduce the Sale Oil quantity to zero barrels of Sale Oil per day for the Month of Delivery by giving Notice. If the Buyer nominates zero barrels of Sale Oil for three consecutive Months, this Agreement shall terminate automatically, without Notice or further action by the State or the Buyer, on the last day of the third consecutive Month that the Buyer nominates zero barrels. However, if the Buyer provides Notice that specifically cites "Refinery Turnaround" in Section 1.33 as a reason for zero nominations, the Buyer may elect to reduce the quantity of Sale Oil it nominates and purchases from the State to zero for three consecutive Months without triggering automatic termination stipulated in this clause.

2.1.4.3 The Buyer's elections to reduce Sale Oil quantities under this Section are subject to the provisions of Section 2.1.6.

2.1.5 **Temporary Sale Oil Quantity Reduction in Event of Force Majeure.** In the event of a Force Majeure under Article 14, the Buyer may temporarily reduce the Sale Oil quantity by an amount equal to the reduction in the Buyer's requirements that is a direct result of the Force Majeure event. To temporarily reduce the Sale Oil quantity in the event of Force Majeure, the Buyer shall include a Notice of temporary reduction in Sale Oil quantity due to Force Majeure under this Section with Notice of the Buyer's monthly Sale Oil nominations of Sale Oil. Each notice of temporary reduction due to Force Majeure shall include documentation of the nature of the Force Majeure event and quantification of the direct impact of the Force Majeure on the Buyer's Sale Oil requirements for the Month of nomination. Temporary reductions in Sale Oil quantity under this Section shall be effective only to the extent that the State is able, through the State's nomination process set out in Section 2.1.2, to reduce the volume of Royalty Oil that the State receives for the Month of Sale Oil delivery, or to sell the volumes from the temporary reductions in Sale Oil quantity as Additional Sale Oil to other buyers under the same or better price terms. The Buyer shall accept delivery of the total volume of Royalty Oil delivered to the State in accordance with the State's nominations of Royalty Oil, unless the State sells the volumes from the temporary reductions in Sale Oil quantity as Additional Sale Oil to other buyers under the same or better price terms.

2.1.6 **Additional Notice Provisions.** The Buyer acknowledges that the Leases from which the State must nominate Royalty Oil require 90 Days' notice to the Lessee prior to decreasing the State's nomination of Royalty Oil to be taken in-kind in any Month. The Buyer acknowledges that if a Lessee invokes the Force Majeure provisions of its Royalty Settlement Agreement or the Leases, the State may be required to give up to 180 Days' (*i.e.*, an additional 90 Days) notice to the Lessee prior to decreasing the State's nomination of Royalty Oil to be taken in-kind in any Month. If a Lessee invokes the Force Majeure terms of its Royalty Settlement Agreement as a result of a reduction in the Buyer's nomination in the event of the Buyer's Force Majeure, Refinery Turnaround, or for any other reason, the Buyer's reduced nomination shall not become effective until the end of the additional 90 Day notice period. If a Lessee invokes the Force Majeure terms of its Royalty Settlement Agreement and extends the notice period an additional 90 Days, the State agrees to make commercially reasonable efforts to reduce the volume of its Royalty Oil nominations.

2.1.7 **No Guarantee of Sale Oil Quantity.** The State shall exercise its rights under the Leases and Royalty Settlement Agreements to request that Royalty Oil be delivered as Sale Oil. The State can deliver Sale Oil only to the extent it receives Royalty Oil from the Lessees. The quantity of Royalty Oil available to the State may vary and may be interrupted from time to time depending on a variety of factors, including the rate of production from the Leases. The State disclaims, and the Buyer waives, any guarantee, representation, or warranty, either express or implied, that a specific quantity of the total, daily, monthly, average, or aggregate Royalty Oil will be delivered as Sale Oil.

2.1.8 **No Guarantee of Source of Sale Oil and Additional Sale Oil.** The State will deliver, as Sale Oil and Additional Sale Oil, Royalty Oil produced from the Leases and delivered to the State as Royalty Oil in-kind. The availability to the State of Royalty Oil in-kind in any Month may vary depending on a variety of factors, including the rate of production from the Leases. The State disclaims, and the Buyer waives, any guarantee, representation, or warranty, either express or implied, that Sale Oil and Additional Sale Oil delivered and sold by the State in any Month is from a certain Lease, Unit, or other area.

2.1.9 **State's Warranty of Title.** The State warrants that it has good and marketable title to the Royalty Oil delivered and sold as Sale Oil and Additional Sale Oil.

2.2 **Quality.**

2.2.1 **No Guarantee of Quality of Sale Oil and Additional Sale Oil.** The Royalty Oil the State delivers to the Buyer as Sale Oil and Additional Sale Oil shall be of the same quality as the Royalty Oil delivered to the State at the Point of Delivery. The quality of the Royalty Oil delivered to the State may vary from time to time. The State disclaims, and the Buyer waives, any guarantee, representation, or warranty, either expressed or implied, of merchantability, fitness for use, or suitability for any particular use or purpose, or otherwise, and of any specific, average, or overall quality or characteristic of Sale Oil and Additional Sale Oil. The Buyer specifically waives any claim that any liquid hydrocarbons, including such substances as crude oil, condensate, natural gas liquids, or return oil from the crude oil topping plant, delivered with the Sale Oil or Additional Sale Oil, are not Sale Oil or Additional Sale Oil for purposes of this Agreement.

2.3 **Price of the Sale Oil and Additional Sale Oil.** The price per barrel of Sale Oil and Additional Sale Oil delivered from each Unit or Lease by the State to the Buyer each Month shall be equal to

$$ANS\ Spot\ Price\ - RIK\ Differential\ - Tariff\ Allowance\ + Quality\ Bank\ Adjustment\ - Line\ Loss$$

"ANS Spot Price" means the monthly average of the daily high and low assessments for the Month of Sale Oil and Additional Sale Oil delivery for ANS oil traded at the United States West Coast as reported by the Platts Oilgram Price report and Reuters online data reporting service. The ANS Spot Price calculation will not include days on which prices are not reported for both reporting services, such as weekends or holidays. If either of these publications ceases to report daily assessments for ANS oil traded at the United States West Coast, the Parties agree to calculate the ANS Spot Price using the data from the remaining reporting service. If either the Buyer or State makes a good faith determination that the ANS Spot Price no longer accurately represents the price for ANS oil traded at the United States West Coast, the Buyer and State will attempt in good faith to arrive at a mutually agreeable alternative source to establish, or substitute for, the ANS Spot Price. If the Buyer and the State arrive at a mutually agreeable alternative source, that source shall be used to determine the ANS Spot Price beginning the Month following the Month in which any of these publications ceased to report daily assessments for ANS oil traded at the United States West Coast. If the Buyer and the State are unable to agree on an alternative source, the State will select the alternative source that most reliably represents the price for ANS oil traded at the United States West Coast based on the best information reasonably available to the State, and that source shall be used to determine the ANS Spot Price beginning the Month following the Month in which any of these publications ceased to report daily assessments for ANS oil traded at the United States West Coast. Any dispute between the Buyer and State concerning the ANS Spot Price under this Section shall be administered in accordance with Section 12.1.

"Tariff Allowance" means the sum of (1) the average, weighted by ownership, of the Minimum Interstate TAPS Tariff (Pump Station No. 1 to Valdez Marine Terminal) on file with the Federal Energy Regulatory Commission ("FERC") for each owner in effect on the Day the Sale Oil and Additional Sale Oil is tendered by the State to the Buyer; and (2) the applicable tariff on file with

FERC for shipment of Sale Oil and Additional Sale Oil upstream of Pump Station No. 1 from the Point of Delivery to Pump Station No. 1. "Minimum Interstate TAPS Tariff" means the effective TAPS tariff on file with the FERC for each carrier on a given Day, excluding incentive tariffs. If the Minimum Interstate TAPS Tariff or tariffs on file with FERC for shipment of Sale Oil and Additional Sale Oil upstream of Pump Station No. 1 that have been used in the calculation of a Tariff Allowance are changed or subject to a refund order by the FERC, the Tariff Allowance will be recalculated using changed FERC-ordered Minimum Interstate TAPS Tariff or changed FERC-ordered tariffs for shipment of Sale Oil and Additional Sale Oil upstream of Pump Station No.1, the Sale Oil and Additional Sale Oil Price will be adjusted accordingly, and the resulting refund to the State (or credit to the Buyer) will be made in accordance with Article III. If a FERC-ordered tariff is suspended or enjoined from implementation, the Tariff Allowance shall not be recalculated until the suspension or injunction is lifted and the FERC order is implemented and goes into effect. The Buyer shall, at the request of the Commissioner, provide the necessary documentation in the form of invoices, etc. from the TAPS and upstream pipeline carriers of tariff payments made by the Buyer and any revised tariff payments including interest paid or received by the Buyer as a consequence of those revised tariff payments.

The "Quality Bank Adjustment" is a per-barrel amount, positive or negative, that accounts for the difference in quality between the oil produced from the units on the North Slope and the co-mingled ANS TAPS stream value at the PSVR connection. The Quality Bank Adjustment for a Unit's stream will be calculated each Month as the difference between the stream value for the PSVR Reference Stream and the stream value at the Point of Delivery. The stream value at the Point of Delivery and PSVR Reference Stream are reported by the TAPS Quality Bank administrator. If the stream value at the Point of Delivery or the stream value for the PSVR Reference Stream is recalculated by the Quality Bank administrator, the Quality Bank Adjustment shall be recalculated and the Price shall be adjusted in accordance with Article III to apply to Sale Oil and Additional Sale Oil that has been delivered to the Buyer beginning on the effective date of the adjustment.

"Line Loss" is a per barrel amount equal to (0.0009) × (ANS Spot Price – RIK Differential – Tariff Allowance + Quality Bank Adjustment).

Appendix 2 is an illustrative example of the calculation of the Price of Sale Oil and Additional Sale Oil. If there is a conflict between Appendix 2 and Section 2.3, Section 2.3 shall control.

2.4 **Delivery of Sale Oil and Additional Sale Oil.**

2.4.1 **Day of First Delivery.** The State will make first delivery of the Sale Oil and Additional Sale Oil to the Buyer at the Point of Delivery on or after January 1, 2023.

2.4.2 **Subsequent Deliveries.** After the first delivery, the State shall tender the Sale Oil and Additional Sale Oil to the Buyer at the Point of Delivery immediately upon the receipt of the Royalty Oil from the Lessees at the Point of Delivery.

2.5 **Passage of Title and Risk of Loss.** Title to, and risk of loss of, the Sale Oil or Additional Sale Oil shall pass from the State to the Buyer for all purposes when the State tenders delivery of the Sale Oil or Additional Sale Oil to the Buyer at the Point of Delivery. The Buyer shall bear all risk and responsibility for the Sale Oil and Additional Sale Oil after passage of title.

2.6 **Indemnification After Passage of Title.** The Buyer shall indemnify and hold the State harmless from and against any and all claims, costs, damages (including reasonably foreseeable consequential damages), expenses, or causes of action arising from or related to any transaction or event in any way related to the Sale Oil and Additional Sale Oil after title has passed to the Buyer. If the Buyer suffers damages or losses caused by third parties and related to the Sale Oil or Additional Sale Oil, the State agrees to cooperate with the Buyer to permit the Buyer to attempt to recover such damages of losses. The State will, on request, assign the State's claims to the Buyer and cooperate in the Buyer's pursuit of State assigned claims.

2.7 **Transportation Arrangements.** The Buyer shall make all arrangements for transportation of the Sale Oil and Additional Sale Oil from the Point of Delivery to, through, and away from the TAPS, and all pipelines upstream from Pump Station 1, and shall be responsible for meeting any linefill and storage tank bottom requirements related to transportation of the Sale Oil and Additional Sale Oil after passage of title. On the State's request, the Buyer shall provide the State with evidence of the arrangements for transportation of the Sale Oil and Additional Sale Oil from the Point of Delivery, through and away from TAPS, and all pipelines upstream from Pump Station 1, and evidence of arrangements for resale, exchange, or other disposal of the Sale Oil and Additional Sale Oil. The Buyer's failure to provide information, evidence, or assurances requested by the State shall, at the State's election and after Notice to the Buyer, constitute a material default under this Agreement.

Article 3 – Invoicing and Payment

3.1 **Monthly Invoices.** On or before the fifth calendar Day of each Month after the first Month of delivery of Sale Oil and Additional Sale Oil, the State shall send to the Buyer, via facsimile transmission or electronic mail, a statement of account with an invoice for the total amount due for the estimated quantity of Sale Oil and Additional Sale Oil delivered to the Buyer during the immediately preceding Month of Sale Oil and Additional Sale Oil delivery and the estimated Price applicable to those deliveries, and the amount of any adjustments for the previous Month. The State will base its estimates on the best information reasonably available to the State. The State shall adjust invoices as provided in Section 3.3.

3.2 **Payment of Invoices.** The Buyer shall pay the total amount of each invoice, including adjustments for previous Months of Sale Oil and Additional Sale Oil delivery, in full, on or before the third Business Day after the date of the statement of account in which the invoice is included. If the third Business Day after the date of the statement of account does not fall on a Business Day, then the invoiced amount is due on the immediately following Business Day. Any amount that the Buyer does not pay in full on or before the payment due date calculated in accordance with this section shall accrue interest as provided in Section 3.6 and become subject to the late payment provisions of Section 3.7, and any other remedies available to the State under this Agreement and at law.

3.3 **Adjustments.** The Buyer acknowledges that any time within eight years after an invoice is sent for a Month of Sale Oil and Additional Sale Oil delivery, the State or the Buyer may receive more accurate information concerning the ANS Spot Price, actual quantity of Sale Oil and Additional Sale Oil delivered to the Buyer, the proper calculation of Tariff Allowance, and Quality Bank Adjustments that affect the Price of the Sale Oil and Additional Sale Oil. The State and the Buyer agree that any time within eight years that such information becomes available to the State or the Buyer, the State shall make adjustments and invoice or credit the Buyer the amount of the adjustments in accordance with the process and retroactivity limits described in Section 2.3. The interest that will bear on changes to the Tariff Allowance will equal the interest paid by the carriers to the shippers under the FERC's regulations. No accrued interest on these adjustments will be paid to the Seller or credited to the Buyer except for FERC ordered changes to Tariff Allowances.

3.4 **Payment of Adjustments.** The Buyer shall pay the total amount of each adjustment in full, on or before the third Business Day after the date of the statement of account that includes the adjustment invoice. If an adjustment is due to the Buyer for an overpayment, the State shall credit to the Buyer the amount of the overpayment on the following Month's invoice or, if no following Month invoice is provided, the State shall refund to the Buyer the amount of the overpayment by the twentieth calendar Day of the following Month. Any amount the Buyer does not pay in full when due shall bear interest at the rate provided in Section 3.6 and become subject to the late payment provisions of Section 3.7, and any other remedies available to the State under this agreement and at law.

3.5 **Adjustments After Termination.** The Buyer and State agree that the State shall continue to make adjustments, in compliance with and subject to the limitations set forth in the provisions of Section 3.3 above, after termination of this Agreement, and agree that the provisions of Articles III shall survive termination of this Agreement for any reason. If following termination of this Agreement an adjustment is determined to be due to the Buyer for overpayment in an amount that exceeds the amount of all sums remaining due from the Buyer to the State, the State shall credit the overpayment against any sums due from the Buyer to the State, and shall refund to the Buyer the remaining amount of the adjustment. Any adjustments made after termination must be paid within 30 Days after the date of the invoice.

3.6 **Interest.** All amounts under this Agreement that the Buyer does not pay in full when due, or that the State does not credit the Buyer or pay in full when due, shall bear interest from the date payment is due, calculated in accordance with Section 3.4, at the rate provided by Alaska Statute 38.05.135(d) or as that statutory provision may later be amended.

3.7 **Late Payment Penalty.** In addition to all other remedies available to the State, if the Buyer fails to make timely payment in full of any amount due, including adjustments, the Buyer shall pay the State as a late payment penalty an amount equal to five percent of the total amount not timely paid, in addition to the amount not timely paid, and interest on the late payment penalty amount and the amount not timely paid as provided in Section 3.4. The Commissioner shall waive imposition of the late payment penalty if the Buyer provides substantial evidence that the failure to make timely payment was not willful and was not due to a mistake in a chronic pattern of mistakes.

3.8 **Disputed Payments.** If a dispute arises concerning the amount of an invoice, the Buyer agrees to pay in full all amounts when due, pending final resolution of the dispute according to the Dispute Resolution procedures in Article XII.

3.9 **Confidential Information.** The State and the Buyer agree that pursuant to Section 3.3, the State may invoice the Buyer for, and the Buyer agrees to pay, amounts that are based upon confidential information held or received by the State. If confidential information is used as the basis for an invoice, upon receipt of a written request from the Buyer, the State shall furnish to the Buyer a certified statement of the Commissioner to the effect that, based upon the best information available to the State, the invoiced amounts are correct. At the request and expense of the Buyer, the Commissioner's certified statement will be based on an audit by an independent third party.

3.10 **Manner of Payment.** The Buyer shall pay all invoices in full within the times specified and without any deduction, set off, or withholding. The Buyer shall pay all invoices by either Automated Clearinghouse or by Federal Reserve Wire Transfer (immediate funds available) according to the instructions provided to the Buyer by the Division of Oil and Gas's Royalty Accounting Manager.

The Buyer must pay an invoice in such other manner or to such other address the State has specified in an invoice or by Notice. All other payments due shall be paid in the same manner and according to the same time schedule provided in this Article. If payment falls due on a Saturday, Sunday, or federal bank holiday, payment shall be made on the next Business Day.

Article 4 – In-State Processing

4.1 **In-State Processing.** The Buyer agrees to use commercially reasonable efforts to process the Sale Oil and Additional Sale Oil at its refineries in Valdez and North Pole, Alaska. "Process" means the manufacture of refined petroleum products.

4.2 **Exchange of Crude Oil.** The Buyer may exchange Sale Oil and Additional Sale Oil for other crude oil only as provided in this Article. An exchange of Sale Oil and Additional Sale Oil for other crude oil shall not reduce the price the Buyer has agreed to pay the State for the Sale Oil and Additional Sale Oil. "Exchange" includes: (1) a direct trade of Sale Oil or Additional Sale Oil for an equal volume of other crude oil; (2) a direct trade of Sale Oil or Additional Sale Oil for other crude oil that involves either cash or volume adjustment, or both, based solely on the differences in quality or location of the crude oils exchanged; (3) sequential transactions in which the Buyer trades Sale Oil or Additional Sale Oil to one party and, in exchange, receives crude oil for a party other than the party to whom the Buyer traded the Sale Oil or Additional Sale Oil; and (4) matching purchases and sales of Sale Oil or Additional Sale Oil for other crude oil.

Article 5 – The Buyer's and the Guarantor's Representations and Obligations

5.1 **Good Standing and Due Authorization of the Buyer.** The Buyer warrants that it is and shall remain at all times during the term of this Agreement: (1) qualified to do business in Alaska; and (2) in good standing with the State. The Buyer warrants that it has all company power and authority necessary, and has performed all company action required, to enter into and fulfill its obligations under this Agreement.

5.2 **Good Standing and Due Authorization of the Guarantor.** The Guarantor warrants that it is and shall remain at all times during the term of this Agreement: (1) qualified to do business in Alaska; and (2) in good standing with the State. The Guarantor warrants that it has all company power and authority necessary, and has performed all company action required, to enter into and fulfill its obligations under this Agreement.

5.3 **Financial Information.** As soon as practicable after the execution of this Agreement and before the State's first Monthly Sale Oil Nomination under Section 2.1.2, the Guarantor shall either provide a Letter of Credit or Surety Bond meeting the requirements of Section 6.2 through 6.5. Subject to the approval of the Commissioner, the Guarantor may, in lieu of providing a Letter of Credit or Surety Bond, cause a financial analyst (the "Financial Analyst") to submit an opinion to the Commissioner in the form of a letter (the "Opinion Letter") about the Guarantor's current and expected future credit rating by a Rating Agency.

5.3.1 **Opinion Letter.** If an Opinion Letter is used, the Financial Analyst shall be:

5.3.1.1 An independent contractor qualified to render an opinion as to the creditworthiness of the Guarantor and shall be in the business of understanding complex financial matters and financial statements to the extent required to render such opinion. The Buyer shall have the right to designate the Financial Analyst, subject to approval by the State. The Financial Analyst shall be a contractor to the Guarantor, and the Guarantor shall be responsible for entering into any necessary contractual arrangements with the Financial Analyst and paying the fees and expenses of the Financial Analyst.

5.3.1.2 The contract between the Guarantor and the Financial Analyst and each Opinion Letter must recite that the Financial Analyst (1) has been provided a copy of this Agreement, (2) understands the significance of the Opinion Letter in the administration of this Agreement, (3) understands that the State will rely on the Opinion Letter, and (4) understands that the Opinion Letter is for the benefit of the State. The contract between the Guarantor and the Financial Analyst shall be subject to approval by the State, and the State shall be given a copy of the contract and all amendments to it.

5.3.1.3 The Opinion Letter shall (i) identify all documents reviewed in forming the opinion, (ii) identify people interviewed in forming the opinion and discuss the nature of the interview, (iii) state the current long term (and short term, if available) credit ratings of the Guarantor by a Rating Agency, and (iv) express an opinion whether those ratings are reasonably likely to fall below BBB- (Standard and Poor's), Baa3 (Moody's), BBB (low) (DBRS), or BBB- (KBRA) at any time during the following twelve Months. The Guarantor shall cause the Financial Analyst to review evidence of the most current ratings by KBRA, DBRS, Standard and Poor's, or Moody's of the Guarantor's long and short term debt, all bank presentations provided to the Guarantor's lenders, all reports on the Guarantor prepared by a Rating Agency, all documents filed by the Guarantor with the Securities and Exchange Commission, if any, any other documents reasonably necessary to deliver the Opinion Letter, and a complete set of year-to-year comparative, independently audited financial statements, including footnotes, prepared in accordance with generally accepted accounting principles.

5.3.1.4 The Guarantor's contract with the Financial Analyst may require the Financial Analyst to protect the confidentiality of the information supplied to it under Section 5.3. The State may review the information supplied to the Financial Analyst under Section 5.3.

5.4 **Financial Condition.** The Guarantor warrants (1) that all financial information submitted to the Financial Analyst or reviewed by the State under Section 5.3 is complete and accurate at the time of preparation, and fairly represents the Guarantor's financial condition at the time of submission; and (2) that there has been no material change in the Guarantor's financial condition, business operations, or properties since the financial information was prepared. The Guarantor warrants that the financial statements were prepared in accordance with generally accepted accounting principles. The Guarantor and the Buyer shall immediately inform the State of any material change in the Guarantor's ownership or ownership of the Buyer, ownership of parent companies, or financial condition, business operations, agreements, or property that is likely to affect their ability to perform their obligations under this Agreement.

5.5 **Absolute Obligations.** The Buyer's and the Guarantor's obligations to pay amounts due, provide assurances of performance in accordance with Article 6, accept, and dispose of and pay for Sale Oil and Additional Sale Oil, are absolute. These obligations shall not be excused or discharged by the operation of any disability of the Buyer or the Guarantor, event of Force Majeure, impracticability of performance, change in conditions, termination of this Agreement, or other reason or cause.

5.6 **Guaranty.** The Buyer is a wholly-owned subsidiary of the Guarantor. The Buyer does not have public financial statements and does not have debt rated by a Rating Agency. The State is not willing to make this Agreement based solely on the credit worthiness of the Buyer. The Guarantor therefore agrees that it guarantees performance of all of Buyer's obligations under this Agreement (the "Guaranteed Obligations" and such guarantee the "Guaranty") as if the Guarantor were the Buyer and legally indistinguishable from Buyer. The Guarantor hereby acknowledges that it will derive substantial and indirect benefit from the transactions contemplated by this Agreement. The State may require the Guarantor at any time to satisfy any unsatisfied obligation of Buyer.

5.6.1 The Guarantor hereby consents and agrees that, without notice to or further assent from the Guarantor, but subject at all times to the terms of this Agreement: (i) the time, manner, place or terms of any payment under this Agreement may be extended or changed; (ii) the time for Buyer's performance of or compliance with any term, covenant or agreement on its part to be performed or observed under this Agreement may be extended, or such performance or compliance waived, or failure in or departure from such performance or compliance consented to, all in such manner and upon such terms as the State may deem proper; (iii) the State may discharge or release, in whole or in part, the Guarantor or any other person liable for the payment and performance of all or any part of the Guaranteed Obligations, and may permit or consent to any such action or any result of such action; (iv) the State may request and accept other guaranties of the Guaranteed Obligations and may, from time to time, in whole or in part, surrender, release, subordinate, modify, waive, rescind, compromise or extend any such guaranty and may permit or consent to any such action or the result of any such action; and (v) the State may exercise, or waive or otherwise refrain from exercising, any other right, remedy, power or privilege available to the State, with respect to the Guaranteed Obligations and any collateral therefor, even if the exercise of such right, remedy, power or privilege affects or eliminates any right of subrogation or any other right of the Guarantor against Buyer; all as the State may deem advisable, and all without impairing, abridging, releasing or affecting the Guaranty.

5.6.2 The Guarantor waives and agrees not to assert: (i) any right to require the State to proceed against Buyer, any other guarantor or any other person, to proceed against or exhaust any collateral or other security held for the Guaranteed Obligations (except to the extent required by applicable law), or to pursue any other right, remedy, power or privilege of the State whatsoever; (ii) the defense of the statute of limitations, but only to the limited extent necessary to permit an action by the State to seek enforcement of the State's right to receive payment pursuant to Section 3.3; (iii) any defense arising by reason of any lack of corporate or other authority or any other defense of Buyer other than those, if any, available to Buyer under this Agreement; (iv) any rights to set-offs and counterclaims other than those, if any, available to Buyer under this Agreement; and (v) without limiting the generality of the foregoing, to the fullest extent permitted by law, any other defenses or benefits that may be derived from or afforded by applicable law limiting the liability of or exonerating guarantors or sureties, or which may conflict with the terms of the Guaranty.

5.6.3 The Guarantor waives any and all notice of the acceptance of the Guaranty, and any and all notice of the creation, renewal, modification, extension or accrual of the Guaranteed Obligations, or the reliance by the State upon the Guaranty, or the exercise of any right, power or privilege hereunder. The Guaranteed Obligations shall conclusively be deemed to have been created, contracted, incurred, and permitted to exist in reliance upon the Guaranty. The Guarantor waives promptness, diligence, presentment, protest, demand for payment, notice of default, dishonor or nonpayment and all other notices to or upon Buyer, the Guarantor or any other person with respect to the Guaranteed Obligations.

5.6.4 The obligations of the Guarantor hereunder are independent of and separate from the obligations of Buyer and any other guarantor and upon the occurrence and during the continuance of any default, a separate action or actions may be brought against the Guarantor, whether or not Buyer or any such other guarantor is joined therein, or a separate action or actions are brought against Buyer or any such other guarantor.

5.6.5 Until the Guaranteed Obligations shall be satisfied in full, the Guarantor shall not have, and shall not directly or indirectly exercise, (i) any rights that it may acquire by way of subrogation under the Guaranty, by any payment hereunder or otherwise, (ii) any rights of contribution, indemnification, reimbursement or similar suretyship claims arising out of the Guaranty, or (iii) any other right which it might otherwise have or acquire (in any way whatsoever) which could entitle it at any time to share or participate in any right, remedy or security of the State as against Buyer or other guarantors in connection with the Guaranty. If any amount shall be paid to the Guarantor on account of the foregoing rights at any time when any Obligations are outstanding, such amount shall be held in trust for the benefit of the State and shall forthwith be paid to the State to be credited and applied to the Guaranteed Obligations.

5.6.6 Notwithstanding anything to the contrary in this Agreement, (i) the Guarantor shall not be liable hereunder for any indirect, consequential, exemplary, punitive or special damages or any damages calculated on the basis of lost profits or lost opportunity; and (ii) the Guarantor's liability under this Agreement is limited to the aggregate amount of liabilities and other obligations owed by the Buyer to the State under this Agreement and in any event is expressly limited to the performance assurance amount under Article 6 in the aggregate.

5.7 **Due Authorization of State.** State warrants that it has all power and authority necessary, and has performed all action required, to enter into and fulfill its obligations under this Agreement.

Article 6 – Assurance of Performance

6.1 **Credit Review.** If the Guarantor: (i) elects to provide a Letter of Credit or Surety Bond pursuant to Section 5.3; or (ii) elects to use an Opinion Letter pursuant to Section 5.3, and fails to timely submit its financial statements and other required documents and information, such that the

Financial Analyst is unable to timely submit the Opinion Letter; or (iii) if, in the opinion of the Financial Analyst, the Guarantor's credit ratings have fallen below, or are reasonably likely in the twelve Months following the Opinion Letter, to fall below (a) "BBB-" (Standard and Poor's "Long term issuer"), (b) "Baa3" (Moody's Investor Services "Issuer Ratings/Long Term Obligation Ratings"), "BBB (low)" (DBRS), or "BBB-" (KBRA); (iv) or the Guarantor is not rated by a Rating Agency; then the Guarantor shall immediately deliver to the State a one year irrevocable stand-by Letter of Credit or Surety Bond meeting the requirements of Sections 6.2 through 6.5.

The Guarantor shall annually renew and continuously maintain the Letter of Credit or Surety Bond in effect until such time as, in the opinion of the Financial Analyst, the Guarantor's credit rating is no longer reasonably likely to remain below (a) "BBB-" (Standard and Poor's "Long term issuer"); (b) "Baa3" (Moody's Investor Services "Issuer Ratings/Long Term Obligation Ratings") (c) "BBB (low)" (DBRS), or (d) "BBB-" (KBRA) at any time during the twelve Months following the Opinion Letter.

6.2 **Letter of Credit or Surety Bond.** In the event that the Guarantor elects or is required to deliver a letter of credit or surety bond to the State in accordance with Section 6.1, the Letter of Credit or Surety Bond shall be in a form satisfactory to the Commissioner and shall be in effect on delivery. The Letter of Credit shall be issued for the benefit of the State by a state or national banking institution of the United States that is insured by the Federal Deposit Insurance Corporation and has an aggregate capital and surplus amount of not less than One Hundred Million Dollars ($100,000,000) ("Issuer"), or other banking institution approved by the Commissioner, such approval not to be unreasonably withheld. The principal face amount of the Letter of Credit or Surety Bond shall be an amount reasonably estimated by the Commissioner to be equal to the Price of all Sale Oil and Additional Sale Oil to be delivered by the State to the Buyer during the 50 Days immediately following delivery of the Letter of Credit or Surety Bond to the Commissioner. The Commissioner will calculate the amount of the Letter of Credit or Surety Bond as follows:

- The Price for the month immediately prior to the calculation date; *multiplied by*

- The maximum number of barrels of crude requested by the Buyer for any day in the 50 days immediately following the calculation; *multiplied by*

- 50 days.

For the period of the Initial Term, the Guarantor and the Commissioner agree that the amount of any Letter of Credit or Surety Bond provided to the State shall equal $39.375 million; *provided*, that the Commissioner may review (or the Guarantor may request that the Commissioner review) the amount of the Letter of Credit or Surety Bond one month from the date of this agreement and every three months thereafter to determine if, using the formula described above, an adjustment to the amount of the Letter of Credit or Surety Bond is required to satisfy the conditions of this Section 6.2.; *provided further*, that such adjustment will only be made to any existing Letter of Credit or Surety Bond, if such adjustment is equal to or greater than 10% of the amount of the Letter of Credit or Surety Bond in place. The Letter of Credit or Surety Bond shall not require the State to submit any documentation in support of drafts drawn against it other than a certified statement by the Commissioner and the State's Attorney General that the Guarantor is liable to the State for an amount of money equal to the amount of the draft, that the amount of money is due and payable in full, and it has not been timely paid. Any Surety Bond provided to the State hereunder may not be cancellable by the surety company without at least 60 days' prior written notice to the State (a "Cancellation Notice"). The Guarantor shall have 30 days from the date of receipt of a Cancellation Notice to provide other performance assurances to the State in compliance with this Agreement, or shall be in default hereunder and the State shall be entitled to immediately pursue the remedies described in Section 9.2.

6.3 Performance Assurance After Termination. If a Letter of Credit or Surety Bond is in effect immediately prior to Termination of the Agreement, the Commissioner may grant that After Termination, a Letter of Credit or Surety Bond be reduced to the amounts listed in the following reduction schedule:

Year 1 After Termination (Jan 01, 2028-Jun 30, 2028) - $40 million

Year 1 After Termination (Jul 01, 2028-Dec 31, 2028) - $20 million

Year 2 After Termination (Jan 01, 2029-Dec 31, 2029) - $10 million

Years 3-8 After Termination (Jan 01, 2030-Dec 31, 2035) - $5 million

The Guarantor acknowledges that the Commissioner may review, and request, that the amount of the Letter of Credit or Surety Bond required to be maintained after the third year of contract Termination be increased, if the Commissioner estimates that the value of all adjustments which may be made under Article III exceed $5 million. On request by the Guarantor, the Commissioner shall provide the Guarantor with the methodology used by the Commissioner to estimate any increased amount of the Letter of Credit or Surety Bond to be maintained After Termination beyond the third year. The Guarantor acknowledges that the Commissioner may not entertain requests for adjustments of the reduction schedule provided in this section during the eight years After Termination.

As an alternative to maintaining a Letter of Credit or Surety Bond After Termination, and on commercial terms acceptable to the Commissioner, the Guarantor may require that the Buyer establish and maintain an interest-bearing escrow account equal to the value of all adjustments that may be made under Article III, and consistent with the reduction schedule provided in this section with the same payment terms as the Letter of Credit or Surety Bond. The dispute resolution procedure in Article XII applies to a dispute between the parties as to any performance assurance required after Termination.

6.4 **Other Performance Assurance.** The Commissioner may allow the Guarantor to provide security other than a Letter of Credit or Surety Bond if the Commissioner determines other security is adequate to protect the State's interest. The Commissioner may accept the Letter of Credit to be issued by a foreign banking institution that is rated at or higher by both (a) "A+" (Standard and Poor's "Long term issuer"), and (b) "Al" (Moody's Investor Services "Issuer Ratings/Long Term Obligation Ratings"); that has an aggregate capital and surplus amount of not less than Five Hundred Million Dollars ($500,000,000); that uses its US branch, determined to constitute substantial operations by the Commissioner, to issue the Letter of Credit or alternatively arranges that the Letter of Credit is confirmed by a US banking institution; that is domiciled in France, UK, Spain, Japan, Netherlands, Italy or other jurisdictions acceptable to the Commissioner; that agrees to issues the Letter of Credit that is subject to Alaska courts or other jurisdiction acceptable to the Commissioner. The Commissioner may accept a Surety Bond to be issued by a surety company that is listed in the US Department of the Treasury's Listing of Approved Sureties

(Department Circular 570) as certified to do business in Alaska and whose surety bond amount falls within the specified underwriting limitation listed in the Department Circular 570; that is rated at least A in terms of financial strength and XII for financial size by A.M. Best Company or its successors.

6.5 **Correction of Defects in Letter.** The Guarantor shall have five Business Days to correct any defect in the Letter of Credit or Surety Bond beginning on the Business Day the Guarantor first learns of the defect whether through Notice from the State or otherwise. A defect is any failure to comply with the terms and conditions of Article VI.

Article 7 – Measurements

7.1 **Measurements.** The quantity and quality of Sale Oil and Additional Sale Oil the State delivers under this Agreement shall be determined by measurement at the Point of Delivery. Procedures used for metering and measuring the Sale Oil and Additional Sale Oil shall be in accordance with the procedures in effect at the Point of Delivery.

Article 8 – Effective Date and Term

8.1 **Effective Date.** This Agreement shall become effective and enforceable on the date upon which it is signed by all parties ("Effective Date").

8.2 **Initial Term.** The Initial Term of this Agreement shall begin on the Day of First Delivery defined in Section 2.4.1. and terminate 364 Days from the Day of First Delivery in Year 5 of the Contract outlined in Section 2.1.1, except that the Term of this Agreement may be changed as provided in Section 2.1.4 and Article X.

8.3 **Continuation of Obligations.** The provisions of Article III, Section 6.3, Section 6.4, Section 6.5, Section 8.3, Article IX and Article X shall survive termination of this Agreement for any reason or cause. Termination of this Agreement shall not relieve either Party from any expense, liability, or other obligation or any remedy that has accrued or attached prior to the date of termination. For Sale Oil and Additional Sale Oil delivered under this Agreement, termination of this Agreement shall not relieve State or the Buyer of their respective obligations hereunder, including the obligation to pay all production Month invoices, initial adjustments, subsequent adjustments, and interest, and, where applicable, penalties, costs, attorney fees, and any other charges related to the Sale Oil and Additional Sale Oil actually delivered.

Article 9 – Default or Termination

9.1 **Default.**

9.1.1 **Events of Default.** The Commissioner may suspend or terminate the State's obligations to tender, deliver and sell Sale Oil and Additional Sale Oil to the Buyer, and may exercise any one or more of the rights and remedies provided in this Agreement, or at law, if any one or more of the following events of default occur:

9.1.1.1 The Buyer or the Guarantor fails to pay in full any sum of money owed under this Agreement within five Business Days after the State gives the Buyer Notice that payment is past due;

9.1.1.2 Within five Business Days after Notice from the State, the Buyer or the Guarantor fails to provide written assurances satisfactory to the State of the Buyer's or the Guarantor's intention to perform its obligations under this Agreement and evidence or assurances of transportation arrangements under Section 2.7;

9.1.1.3 There is a material change in the Buyer's or the Guarantor's financial condition, business operations, agreements, or property or ownership that is likely to affect the Buyer's or the Guarantor's ability to perform its obligations under this Agreement, and within five Business Days after Notice from the State, the Buyer or the Guarantor is unable or unwilling to provide performance assurances meeting the requirements of Article VI;

9.1.1.4 The Buyer or the Guarantor fails to perform any of its obligations under this Agreement, and cannot cure the non-performance or the non-performance continues for more than 30 Days after the State has given Notice to the Buyer or the Guarantor of its non-performance;

9.1.1.5 Any representation or warranty made by the Buyer or the Guarantor in this Agreement is found to have been materially false or incorrect when made; or

9.1.1.6 The Guarantor fails, or is unable for any reason (including reasons beyond the Guarantor's control), to maintain performance assurances required under Article VI, regardless of the Guarantor's willingness or ability to perform any other obligations under this Agreement.

9.1.2 **Default by Failure or Inability to Pay.** The Buyer or the Guarantor shall immediately provide the State with Notice if the Buyer or the Guarantor is unable to pay any of its debts when due, makes an arrangement for the benefit of creditors, files a bankruptcy petition, or is otherwise insolvent. Upon Notice from the Buyer or the Guarantor, or if the State independently determines that the Buyer or the Guarantor is unable to pay any of its debts when due or is otherwise insolvent, the State's obligations to deliver and sell Sale Oil and Additional Sale Oil to the Buyer shall automatically and immediately terminate without any requirement of Notice to the Buyer or the Guarantor or other action by the State. Upon termination of the State's obligations under this Section 9.1.2, the Buyer and the Guarantor shall be liable for payment and performance of all their obligations for Sale Oil and Additional Sale Oil the State delivered to the Buyer before termination and for a minimum of one hundred Days after termination, plus an additional 90 Days if a Lessee invokes the Force Majeure term of its Royalty Settlement Agreement. Within 30 Days after termination under this Article 9.1.2, the State shall have the right, upon consent of the Buyer or the Guarantor, to reinstate all of the State's, the Buyer's and the Guarantor's obligations under this Agreement retroactive to the date of termination.

9.2 **State's Remedies.** If the Buyer or the Guarantor defaults under this Agreement, in addition to all other remedies available to the State under this Agreement or at law, the following remedies shall be available to the State:

9.2.1 **The Buyer's and the Guarantor's Obligations Become Due.** All monetary obligations the Buyer or the Guarantor has accrued under this Agreement, even if not yet due and payable, shall immediately be due and payable in full.

9.2.2 **State May Dispose of Sale Oil and Additional Sale Oil.** The State may dispose of some or all of the Sale Oil or Additional Sale Oil to third parties. If the State exercises this remedy, regardless of whether this Agreement is terminated, the Buyer and the Guarantor shall be and shall remain liable to the State for the amount of the difference between the Price for the Sale Oil or Additional Sale Oil under Article II and the actual price the State receives from disposition of the Sale Oil or Additional Sale Oil to third parties.

9.2.3 **Indemnification for Loss.** The Buyer and the Guarantor shall hold the State harmless and indemnify it against all its liability, damages, expenses, attorney's fees and costs, and losses directly arising out of the Buyer's or the Guarantor's default, termination of the State's obligations, and disposal of the Sale Oil or Additional Sale Oil to third parties. Additionally, if the Buyer or the Guarantor defaults in the payment of any monetary amounts due to the State for Sale Oil or Additional Sale Oil tendered or delivered under this Agreement, the Buyer or the Guarantor shall pay the State 100 percent of reasonable actual costs and attorney fees incurred by the State in pursuing payment of the monetary amounts due, regardless of whether litigation is commenced and regardless of whether legal services are provided by the Attorney General's office or private counsel.

9.2.4 **Other Rights and Remedies.** The State shall have the right cumulatively to exercise all rights and remedies provided in this Agreement and by law and obtain all other relief available under law or at equity, including mandatory injunction and specific performance.

9.3 **Limitation of the Buyer's and the Guarantor's Remedies.** If the Buyer or the Guarantor breaches or defaults in any of its obligations under this Agreement, the Buyer or the Guarantor shall not obtain a temporary restraining order or preliminary injunction preventing the State from disposing of the Sale Oil or Additional Sale Oil in accordance with Section 9.2.2.

9.4 **Article Survives Termination.** This Article survives termination of the Agreement.

Article 10 – Disposition of Oil Upon Default or Termination

10.1 **Disposition of Oil Upon Default or Termination.** The Buyer and the Guarantor acknowledge that the State may be required to provide six Months' notice to the Lessees before the State may decrease its in-kind nomination of Royalty Oil in any Month. If this Agreement terminates for default or any other reason after the Buyer has nominated or is deemed to have nominated Sale Oil or Additional Sale Oil, the Buyer shall continue to accept and pay for Sale Oil or Additional Sale Oil through the first Day of the Month following expiration of a minimum of 100 Days after the date of termination, if the Commissioner so requires. If, however, the additional notice provisions of Article 2.1.6 are invoked, the Buyer shall continue to accept and pay for Sale Oil or Additional Sale Oil until the expiration of six Months and ten Days after the date of default or notice of termination.

10.2 **Security for Disposal of Sale Oil and Additional Sale Oil.** To secure the Buyer's obligations to purchase and dispose of Sale Oil or Additional Sale Oil, upon the Commissioner's request, if the Buyer refuses to accept or receive Sale Oil or Additional Sale Oil under this Agreement, the Buyer shall assign or otherwise transfer to the State, or its designee, all or part of the Buyer's right to transport the Sale Oil or Additional Sale Oil through and away from the TAPS, and all pipelines upstream from Pump Station 1, whether such rights are under nominations, leases, contracts, tariffs, charter parties, or other agreements. The State will incur liability or obligations under such assignment or transfer only to the extent the State actually exercises its rights to succeed to the Buyer's interests under and obtain the benefits of the assignments.

Article 11 – Nonwaiver

11.1 **Nonwaiver.** The failure of a Party to insist upon strict or a certain performance, or acceptance by a Party of a certain performance or course of performance under this Agreement shall not: (1) constitute a waiver or estoppel of the right to require certain performance or claim breach by similar performance in the future; (2) affect the right of another Party to enforce any provision; or (3) affect the validity of any part of this Agreement.

Article 12 – Dispute Resolution

12.1 **Dispute Resolution.** Any disagreement or dispute arising out of or related to this Agreement shall be decided according to the dispute resolution procedure set forth in this Article. The procedure set for in this Article shall be initiated by a Party by providing written Notice of the disagreement or dispute to the other Parties. No later than sixty Days after a Party provides written Notice, the Parties shall each present any arguments and evidence supporting its view of the disputed term, condition, right or obligation in writing to the Commissioner for consideration. Prior to consideration by the Commissioner, the State, the Buyer, and the Guarantor shall not have the right to civil litigation-type discovery or a civil litigation-type trial with the right to call or cross-examine witnesses unless granted by the Commissioner, after request. Within 30 Days after the Parties submit their final arguments and evidence, the Commissioner shall issue a finding for the basis for the conclusion. Any Commissioner finding issued under the foregoing procedure shall be considered a final administrative order and decision appealable to the Alaska Superior Court pursuant to AS 22.10.020 and applicable Alaska Rules of Court.

Article 13 – Severability

13.1 **Severability.** If a court decrees any provision of this Agreement to be invalid, all other provisions of this Agreement shall remain valid. If, however, invalidation of a provision impairs a material right or remedy under this Agreement, the Parties will negotiate in good faith to maintain the original intent and benefits of this Agreement. If the Parties cannot restore the original intent and benefits of this Agreement, then either Party may terminate this Agreement by giving Notice.

Article 14 – Force Majeure

14.1 **Effect of Force Majeure.** Except for the Buyer's and the Guarantor's obligations to pay amounts due, provide assurance of performance in accordance with Article VI, accept, dispose of, and pay for Sale Oil and Additional Sale Oil, no Party shall be liable for failure to perform if performance is substantially prevented by Force Majeure after commercially reasonable efforts to perform. Except, however, if the Buyer or the Guarantor is prevented by Force Majeure from performing any material obligation for 180 successive Days or more, the State shall have the right to terminate this Agreement on 60 Days' Notice. If the State is prevented by Force Majeure from performing any material obligation for 180 successive Days or more, the Buyer may terminate this Agreement on 60 Days' Notice. Before a Party exercises the right to terminate this Agreement, the Party may request the other Parties to negotiate in good faith to restore performance.

14.2 **Force Majeure.** In this Agreement the term "Force Majeure" means an event or condition not within the reasonable control of the Party claiming "Force Majeure."

14.2.1 Force Majeure Events include, but are not limited to, the following events:

14.2.1.1 Act of God, fire, lightning, landslide, earthquake, storm, hurricane, hurricane warning, flood, high water, washout, explosion, well blowout, failure of plant, pipe or equipment; or

14.2.1.2 Strike, lockout, or other industrial disturbance, act of the public enemy, war, military operation, blockade, insurrection, riot, epidemic, arrest or restraint by government of people, terrorist act, civil disturbance, or national emergency; or

14.2.1.3 Act, order, or requisition of any governmental agency or acting governmental authority or any governmental proration, regulation, or priority.

14.2.2 Force Majeure events do not include changes in commercial or financial markets affecting the price of crude oil or processed petroleum products.

14.3 **Notice and Remedy of Force Majeure.** If a Party believes that a Force Majeure event has occurred, the Party shall immediately provide Notice to the other Parties of its claim of Force Majeure. The Party claiming Force Majeure shall use commercially reasonable efforts to remedy the Force Majeure. Except for the Buyer's and the Guarantor's absolute obligations to pay amounts due, provide assurances of performance in accordance with Article VI, and accept, dispose of, and pay for Sale Oil and Additional Sale Oil, the disabled Party's obligations to perform that are affected by the Force Majeure shall be suspended from the time of Notice to the other Parties until the disability caused by the Force Majeure should have been remedied with reasonable diligence.

Article 15 – Notice

15.1 **Execution of Agreement.** This Agreement may be executed in counterparts and each shall be deemed an original. This Agreement may also be executed by electronic means.

15.2 **Method of Notice.** All notices, consents, requests, demands instructions, approvals, and other communications permitted or required shall be made in writing and delivered by any two of the following methods: (a) personally delivered, (b) delivered and confirmed by facsimile transmission, (c) delivered by overnight courier delivery service, (d) delivered and confirmed by electronic mail, or (e) deposited in the United States mail, first class, postage prepaid, certified or registered, return receipt requested, addressed as follows:

Commissioner of Natural Resources
550 West 7th Avenue, Suite 1400
Anchorage, Alaska 99501-3650
Facsimile Number: (907) 269-8918

and

Director, Division of Oil and Gas
550 West 7th Street, Suite 1100
Anchorage, Alaska 99501-3510

Facsimile Number: (907) 269-8938

the Buyer:

Petro Star Inc.
Address: 3900 C Street, Suite 802
Anchorage, Alaska 99503
Facsimile Number:
Attention: General Counsel

the Guarantor:

Arctic Slope Regional Corporation
Address: 3900 C Street, Suite 802
Anchorage, Alaska 99503
Facsimile Number:
Attention: General Counsel

or to any other place within the United States of America designated in writing by the State, the Buyer or the Guarantor.

15.3 **Notice Effective Date.** Notice given by personal delivery, or other reputable overnight courier delivery service, or United States mail, first class, postage prepaid, certified or registered, return receipt requested, shall be effective on the date of actual receipt at the appropriate address. Notice given delivered and confirmed by facsimile or electronic mail shall be effective on the date of actual receipt if received during recipient's normal business hours, or at the beginning of the next Business Day after receipt if received after recipient's normal business hours. The Notice Effective Date is the effective date of the first of the two Notices received.

15.4 **Change of Address.** A Party may notify the other Parties of changes in its address by giving Notice.

Article 16 – Rules and Regulations

16.1 **Rules and Regulations.** This Agreement is subject to the laws of the State of Alaska, and orders, rules and regulations of the United States, the State of Alaska, and any duly constituted agency of the State of Alaska.

Article 17 – Sovereign Power of the State

17.1 **Sovereign Power of the State.** This Agreement shall not be interpreted to limit in any way the State’s ability to exercise any sovereign or regulatory powers, whether conferred by constitution, statute, or regulation. The State’s exercise of any sovereign or regulatory power shall not be deemed to enlarge any of the Buyer’s or the Guarantor’s rights, or limit any of the Buyer’s or the Guarantor’s obligations or liabilities under this Agreement.

Article 18 – Applicable Law

18.1 **Governing Law.** This Agreement, and all matters arising from or related to this Agreement, shall be governed, construed, and determined by the laws of the State of Alaska.

18.2 **Jurisdiction.** Any legal action or proceeding arising out of or related to this Agreement shall be brought in a state court of general jurisdiction sitting in the State of Alaska, and the Parties irrevocably submit to the jurisdiction of that court in any action or proceeding.

18.3 **Venue.** The Parties agree that the venue for any legal action or proceeding arising out of or related to this Agreement shall be in the Alaska Superior Court sitting in Anchorage, Alaska.

Article 19 – Warranties

19.1 **Warranties.** The purchase and sale of Royalty Oil under this Agreement are subject only to the warranties the State has expressly set forth in this Agreement. The State disclaims and the Buyer and the Guarantor waive all other warranties, express or implied in law.

Article 20 – Amendment

20.1 **Amendment.** This Agreement may be supplemented, amended, or modified only by written instrument duly executed by the Parties, and, where required, only on approval under Alaska Statute 38.06.055.

20.2 **Legislative Approval.** Any material amendment to this Agreement that appreciably reduces the consideration received by the State requires prior approval of the legislature.

Article 21 – Successors and Assigns

21.1 **Assignments and Other Transfers.** The Buyer may freely assign its rights and obligations to an Affiliate formed under the laws of a state in the United States of America. An "Affiliate" shall mean an entity that is directly or indirectly controlled by the Guarantor or the Guarantor's permitted assigns, or is directly or indirectly controlled by an entity that directly or indirectly controls the Guarantor or the Guarantor's permitted assigns, where control means the right to vote more than fifty percent of the voting interest in the entity.

The Buyer and the Guarantor may, without consent of the State, collectively assign their rights and obligations under this Agreement to a Person that acquires all or substantially all of the Alaska refining assets of the Buyer and the Guarantor (the "Assignee"), provided that at least 45 Days before the effective date of the assignment the Assignee provides to the State (a) all of the financial information and warranties the Guarantor is required to provide under Article V and (b) a copy of the form of the assignment, including Assignee's obligation to assume and discharge all of the Buyer's and the Guarantor's obligations under this Agreement. If, based on the financial information supplied under Article V, Assignee is required to supply performance assurance under Article VI, the performance assurance in the form and amount required by Article VI must be provided to the State at least 30 Days before the effective date of the assignment. No assignment can be made to an Assignee with long term credit ratings of less than BBB (Standard and Poor's), Baa3 (Moody's), or BBB- (KBRA). From and after the effective date of the Assignment, the Buyer and the Guarantor shall be relieved of their rights and obligations under this Agreement except as to any surviving obligations expressed in the Agreement. No assignment shall be effective until after 45 Days' Notice to the State.

The Buyer and the Guarantor may not otherwise assign their rights or obligations under this Agreement without first obtaining the written consent of the Commissioner, which may not be unreasonably withheld.

21.2 **Binding on Successors.** This Agreement shall be binding upon and inure to the benefit of the legal representative, Parties and their successors, and assigns of the Parties.

Article 22 – Records

22.1 **Inspection of Records.** The Parties shall each accord to the other and the other's authorized agents, attorneys, and auditors access during reasonable business hours to any and all property, records, books, documents, or indices related to the Buyer's, the Guarantor's or the State's performance under this Agreement, and which are under possession or control of the Party from which access is sought, so the other Party may inspect, photograph, and make copies of the property, records, books, documents, or indices except: (1) the State shall not be required to disclose any information, data, or records that it is required by state or federal law or regulation, or by agreement with the Person supplying the record, to be held confidential; (2) the State's access to and treatment of the Guarantor's financial records shall be limited by Section 5.3; and (3) no party shall be required to produce documents that are protected by the attorney-client privilege or in the case of the State deliberative process privilege. If information the State obtains from the Buyer or the Guarantor may be held confidential under state or federal law or regulation, the Buyer may request in writing that the State hold the information confidential, and the State shall keep the information confidential to the extent and for the term provided by law.

Article 23 – Employment of Alaska Residents

23.1 **Employment of Alaska Residents.** The Buyer shall comply with all valid federal, state, and local laws in hiring Alaska residents and companies, and shall not discriminate against Alaska residents and companies. Within the constraints of law, the Buyer voluntarily agrees to employ Alaska residents and Alaska companies to the extent they are available, willing, and at least as qualified as other candidates for work performed in Alaska in connection with this Agreement. "Alaska resident" means an individual who is physically present in Alaska with the intent to remain in the state indefinitely. An individual may demonstrate an intent to remain in the state by maintaining a residence in the state, possessing a resident fishing, trapping or hunting license, or receiving a permanent fund dividend. "Alaska companies" means companies incorporated in Alaska or whose principal place of business is in Alaska. If a court invalidates any portion of this provision, the Buyer agrees to employ Alaska residents and Alaska companies to the extent permitted by law.

Article 24 – Counterparts

24.1 **Counterparts.** This Agreement may be executed in multiple counterparts. It is not necessary for the Parties to sign the same counterpart. Each duly executed counterpart shall be deemed to be an original and all executed counterparts taken together shall be considered to be one and the same instrument.

Article 25 – Miscellaneous

25.1 **Agreement Not to Be Construed Against Any Party as Drafter.** The Parties recognize that this Agreement is the product of the joint efforts of the Parties and agree that it shall not be construed against any Party as drafter.

25.2 **Entire Agreement.** This Agreement constitutes the entire agreement and understanding between the Parties about the subject matter of this transaction and all prior agreements, understandings, and representations, whether oral or written, about this subject matter are merged into and superseded by this written Agreement.

25.3 **Headings.** The headings throughout this Agreement are for reference purposes only and shall not be construed or considered in interpreting the terms and provisions of this Agreement.

25.4 **Authority to Sign.** Each Person signing this Agreement warrants that he or she has authority to sign the Agreement.

25.5 **Further Assurances.** The Parties agree to do such further acts or execute such further documents as may reasonably be required to implement this Agreement.

25.6 **Currency.** All dollar amounts are U.S. dollars.

Signatures:

THE STATE OF ALASKA

____
Corri A. Feige
Commissioner
Department of Natural Resources

Date:

PETRO STAR INC.

____
Doug Chapados
President and CEO

Date:

ARCTIC SLOPE REGIONAL CORPORATION

____
Charles Kozak
EVP and Chief Financial Officer

Date:

Appendix 1 – Sale Oil Nomination Procedure

Example Nomination Procedure for July 2014 Deliveries

	Prudhoe Bay & Satellites	Greater Pt McIntyre Area	MPU Total	DIU Total	KRU Total	Northstar Total	CRU Total	Badami Total	Oooguruk Total	Nikaitchuq Total	Total
March 15, 2014											
State receives preliminary barrel per day (bpd) production forecasts from the unit operator 105 days prior to the start of the production month	149,600	14,000	14,000	5,800	73,700	9,200	47,500	1,000	6,700	8,000	329,500
Not later than											
March 21, 2014											
RIK purchaser notifies state of monthly bpd nomination (a)											30,000
Not later than											
March 30, 2014											
State computes RIK %											
Estimated royalty rates	12.50%	13.34%	13.77%	14.42%	12.50%	27.50%	14.74%	14.80%	5.00%	12.50%	
State Ownership	100.00%	100.00%	100.00%	100.00%	100.00%	82.16%	67.82%	100.00%	100.00%	100.00%	
Total state estimated royalty bpd (bpd * royalty rate)	18,700	1,868	1,928	836	9,213	2,079	4,748	148	335	1,000	40,854
State's Total RIK nomination percentage (Purchaser RIK bpd/estimated royalty bpd)											73.43%
March 30, 2014											
State notifies unit operator of state's RIK nomination percentage	94.64%	94.64%	95.00%	95.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
May 26, 2014											
Unit operator notifies state and working interest owners of updated production forecast											
Production forecast (bpd) for July production month	188,938	30,009	10,900	8,560	72,080	7,300	45,064	1,291	6,900	7,800	378,842
State calculates RIK bpd											
Royalty rates based on updated estimates (b)	12.50%	13.391158%	12.50%	12.50%	12.50%	27.50%	14.74%	14.80%	5.00%	12.50%	
State's RIK nomination percentage	94.64%	94.64%	95.00%	95.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
RIK bpd (bpd production forecast * Royalty rate * nomination %)	22,351	3,803	1,294	1,017	7,659	0	0	0	0	0	36,124
State's Tendering percentage (RIK bpd/Production Forcast volumes)	11.83000000%	12.67339193%	11.87500000%	11.87500000%	10.62500000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	
May 31, 2014											
State notifies RIK purchaser of bpd volume available for July production month	22,351	3,803	1,294	1,017	7,659	0	0	0	0	0	36,124
August 2, 2014											
State invoices RIK purchaser for May production											
Metered volume for July 1-31, 2014	7,279,221	561,360	375,992	260,120	2,712,974	256,569	1,406,636	42,261	207,194	248,903	13,351,230
State's RIK Tendering percentage	11.83000000%	12.67339193%	11.87500000%	11.87500000%	10.62500000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	
Total RIK bbls	861,131.84	71,143.35	44,649.05	30,889.25	288,253.49	-	-	-	-	-	1,296,067
bpd volume (Total RIK/31) (varies from forecast)	27,778	2,295	1,440	996	9,298	0	0	0	0	0	41,809
bpd volume varies from forecast	9,078	427	(488)	160	86						9,264

Table notes:
(a) The state determines from which units to nominate RIK volumes (Section 2.1.2 of the Agreement)
(b) The estimated royalty percentage for Greater Pt McIntyre is a composite royalty rate from several fields and will vary with production

Appendix 2 – Example of Calculation of Price of Sale Oil and Additional Sale Oil

The Price of the Sale Oil and Additional Sale Oil delivered by the State to the Buyer each Month for each Unit from which the Sale Oil and Additional Sale Oil is nominated is:

$$Price = ANS\ Spot\ Price - 1.95 - Tariff\ Allowance + Quality\ Bank\ Adjustment - Line\ Loss$$

ANS Spot Price

Table 2-1 illustrates the calculation of the ANS Spot Price for July 2014.

Table 2-1: Calculation of ANS Spot Price

	Platt's Oilgram Price Report			Reuters On-line Data Reporting Service		
Effective Date	ANS Daily Low	ANS Daily High	ANS Daily Midpoint Average	ANS Daily Low	ANS Daily High	ANS Daily Midpoint Average
07/01/14	$111.28	$111.32	$111.30000	$110.49	$110.59	$110.54000
07/02/14	$113.01	$113.05	$113.03000	$112.44	$112.54	$112.49000
07/03/14	$112.64	$112.68	$112.66000	$112.20	$112.30	$112.25000
07/07/14	$114.66	$114.70	$114.68000	$114.22	$114.32	$114.27000
07/08/14	$112.28	$112.32	$112.30000	$111.74	$111.85	$111.79500
07/09/14	$111.20	$111.24	$111.22000	$110.79	$112.13	$111.45954
07/10/14	$113.36	$113.40	$113.38000	$114.60	$114.70	$114.65000
07/11/14	$113.84	$113.88	$113.86000	$114.84	$114.94	$114.89000
07/14/14	$113.47	$113.51	$113.49100	$113.60	$113.70	$113.65050
07/15/14	$114.90	$114.94	$114.92000	$115.19	$115.29	$115.24000
07/16/14	$113.55	$113.59	$113.57000	$114.08	$114.18	$114.13000
07/17/14	$115.16	$115.19	$115.17500	$115.45	$115.55	$115.50000
07/18/14	$115.30	$115.34	$115.32000	$115.39	$115.49	$115.44000
07/21/14	$116.40	$116.50	$116.45000	$116.18	$116.28	$116.23000
07/22/14	$116.20	$116.23	$116.21500	$116.81	$116.94	$116.87500
07/23/14	$116.50	$116.55	$116.52500	$116.15	$116.25	$116.20000
07/24/14	$116.65	$116.70	$116.67500	$116.54	$116.64	$116.59000
07/25/14	$115.71	$115.75	$115.73000	$115.35	$115.45	$115.40000
07/28/14	$114.75	$114.79	$114.77000	$114.39	$114.50	$114.44500
07/29/14	$113.93	$113.98	$113.95500	$114.64	$114.75	$114.69500
07/30/14	$113.55	$113.60	$113.57500	$113.18	$113.28	$113.23000
07/31/14	$114.16	$114.20	$114.18000	$114.46	$114.54	$114.50000
		Platt's Montly Avg. =	$114.22641		Reuters Monthly Avg. =	$114.29409
		ANS Spot Price$_{July\ 2014}$ =	$114.260250			

Tariff Allowance

The Tariff Allowance (TA) is the sum of (1) the average, weighted by ownership, of the Minimum Interstate TAPS Tariff for each owner in effect on the Day the Sale Oil and Additional Sale Oil is tendered by the State to the Buyer; and (2) the applicable tariff on file with FERC for shipment of Sale Oil upstream of Pump Station No. 1 from the Point of Delivery to Pump Station No. 1. Table 2-2, 2-3, and 2-4 illustrates how the state will calculate the TA for each of the Units from which Sale Oil and Additional Sale Oil may be offered.

Table 2-2: Calculation of TAPS Portion of Tariff Allowance

Ownership-Weighted Average Minimum Interstate TAPS Tariff – July 2014

Pipeline Company	FERC No.	Percent Pipeline Company Ownership	Minimum Interstate TAPS Tariff (Pump Station 1 to Valdez Marine Terminal) by Pipeline Company	TAPS Tariff times Company Ownership Percentage
ConocoPhillips Transportation Alaska, Inc.		29.61017%	$5.04	$1.49235
ExxonMobil Pipeline Company		21.28289%	$5.06	$1.07691
BP Pipelines (Alaska) Inc.		49.10694%	$5.04	$2.47499
		100.0000%		
		Ownership-Weighted Average Minimum Interstate TAPS Tariff =		$5.04426

Table 2-3: Calculation of Portion of Tariff Allowance Upstream of Pump Station No. 1

Minimum Tariff on Pipelines Upstream of Pump Station No. 1 – July 2014

Pipeline Company	FERC No.	Pipeline	Tariff
Kuparuk Transportation Company		Kuparuk River Unit to TAPS Pump Station 1	$0.26400
Endicott Pipeline Company		Endicott Main Production Island to TAPS Pump Station 1	$2.01000
Kuparuk Transportation Company		Milne Point Pipeline Connection to TAPS Pump Station No. 1	$0.19300
Milne Point Pipeline Company		Milne Point Central Facilities to Kuparuk Transportation Company Tie-in	$0.96000
		Total MPU Upstream Tariff Allowance:	$1.15300
Kuparuk Transportation Company		Kuparuk River Unit to TAPS Pump Station 1	$0.26400
Alpine Transportation Company		Colville, Alaska Alpine Field to Kuparuk River Unit	$0.69000
		Total CRU Upstream Tariff Allowance:	$0.95400
NORTHSTAR Pipeline Company		Northstar Unit Seal Island to TAPS Pump Station 1	$2.14000

Table 2-4: Calculation of Tariff Allowance for Each Unit

Calculation of TA for Prudhoe Bay Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Upstream Tariff	$0.00000
TA_{PBU}	$5.04426
Calculation of TA for Kuparuk River Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04497
Kuparuk Transportation Co. Tariff	$0.26400
TA_{KRU}	$5.30826
Calculation of TA for Duck Island Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Endicott Pipeline Co. Tariff:	$2.01000
TA_{DIU}	$7.05426
Calculation of TA for Milne Point Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Kuparuk Transportation Co. Tariff	$0.19300*
Milne Point Pipeline Co. Tariff	$0.96000
TA_{MPU}	$6.19726
Calculation of TA for Colville River Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
Kuparuk Transportation Co. Tariff:	$0.26400
Alpine Transportation Company Tariff:	$0.69000
TA_{CRU}	$5.99826
Calculation of TA for Northstar Unit	
Ownership-Weighted Average Minimum Interstate TAPS Tariff:	$5.04426
NORTHSTAR Pipeline Company. Tariff:	$2.14000
TA_{NSU}	$7.18426

*From Kuparuk Pipeline/Milne Point Pipeline connection to TAPS Pump Station 1.

Quality Bank Adjustment (QBA)

The TAPS Quality Bank compensates shippers of a high-value crude oil stream when a lower- value crude oil stream is blended in the common stream.[1] To calculate the Price of the Sale Oil and Additional Sale Oil at the Point of Delivery an adjustment must be made for the impact that the sale oil will have on the value of the commingled crude oil stream when it enters the TAPS Valdez terminal.

The QBA is a per-barrel value, either positive or negative, and will be calculated each Month by the State for Sale Oil and Additional Sale Oil from each Unit. The State will estimate a QBA for

each applicable Unit for the initial billing. Typically, the State receives the data to calculate the actual QBA for the Month about two Months after the Month the Sale Oil and Additional Sale Oil is delivered. For this reason, the QBA will be subject to a routine true-up in a subsequent adjustment.

[1] Mitchell & Mitchell, 8300 Douglas Avenue, #800, Dallas, TX 75225, administers the TAPS Quality Bank. Anyone who ships oil on TAPS must make prior arrangements with Mitchell & Mitchell to participate in the TAPS Quality Bank.

Table 2-5: Hypothetical TAPS Quality Bank Data

(as provided by the Quality Bank Administrator)

TAPS Quality Bank Stream Values and Total Stream Volume Shipped July 2014				
Sample Location	**Stream**	**Volume (BBL)**	**Stream Value ($/BBL)**	**Total Stream Value ($)**
PBU IPA	PBU IPA	6,339,237	$110.4164400000	$699,955,981.86
LISBURNE	LISBURNE	271,173	$112.2028800000	$30,426,391.58
ENDICOTT	ENDICOTT	202,497	$109.5248100000	$22,178,445.45
KUPARUK	KUPARUK	7,008,864	$109.1719600000	$765,171,420.25
NORTHSTAR	NORTHSTAR	396,155	$115.0336100000	$45,571,139.77
PS #1	PS #1 REFERENCE	14,217,926	**$109.9529832205**	$1,563,303,378.91
GVEA OFFTAKE	GVEA PASSING	10,748,066	$109.9891900000	$1,182,171,073.41
GVEA RETURN	GVEA RETURN	2,601,950	$107.3460500000	$279,309,054.80
GVEA	GVEA REFERENCE	13,350,016	**$109.4740357018**	$1,461,480,128.20
PSVR OFFTAKE	PSVR PASSING	11,912,350	$109.4969400000	$1,304,379,691.54
PSVR RETURN	PSVR RETURN	1,051,990	$105.4520200000	$110,934,470.52
PSVR	PSVR REFERENCE	12,978,304	**$109.1697812657**	$1,415,314,162.05

KTC Quality Bank Stream Values and Total Stream Volume Shipped July 2014				
Sample Location	**Stream**	**Volume (BBL)**	**Stream Value ($/BBL)**	**Total Stream Value ($)**
ALPINE	ALPINE	2,241,772	$110.7967700000	$248,381,096.68
MILNE POINT	MILNE POINT	638,565	$108.6292500000	$69,366,837.03
KUPARUK REFERENCE	KUPARUK REFERENCE	7,010,971	$109.1719600000	$765,401,445.57
NIKAITCHUQ	NIKAITCHUQ	210,697	$107.4115200000	$22,631,285.03
KUPARUK RIVER UNIT	KUPARUK RIVER UNIT	3,919,937	**$108.4257800166**	$425,022,226.84

Table 2-5 shows the kind of information supplied by the TAPS quality bank administrator that will be used to calculate the quality bank differential for Sale Oil and Additional Sale Oil produced from each Unit. The TAPS quality bank administrator provides this information to the State, pipeline owners, and shippers. As a shipper on TAPS, the Buyer will also receive this information. In the column titled “Stream Value ($/BBL)” are the different per-barrel values of each stream produced from the Units from which Sale Oil and Additional Sale Oil may be delivered. The PSVR Reference Stream value is labeled “PSVR Reference” and is the stream value of the blended TAPS stream immediately downstream of the Petro Star Valdez Refinery return stream. The Quality Bank Adjustment is calculated as the difference between the stream value of each Unit and the PSVR Reference Stream.

For example, assume that the Month is July 2014 and the Sale Oil and Additional Sale Oil is produced from Lisburne. The QBA for Sale Oil and Additional Sale Oil from Lisburne

(QBA_{LIS}) is calculated as the per-barrel difference between the Stream value for Lisburne, indicated as “Lisburne” in Table 2.5, and the PSVR Reference Stream Value. In this example Sale Oil and Additional Sale Oil from Lisburne increases the value of the stream of oil measured at Valdez. Therefore, $3.0330987343 per barrel is the QBA incorporated in the calculation of Price for Sale Oil and Additional Sale Oil from Lisburne.

Quality Bank Adjustment for Lisburne	=	the stream value for Lisburne minus the stream value of PSVR Reference (from Table 2-5)
QBA_{LIS}	=	112.2028800000 - 109.1697812657
QBA_{LIS}	=	$3.03310

Note: The Price of Sale Oil and Additional Sale Oil from the PBU IPA and Lisburne are invoiced separately.

Using the results of the example calculations above, Line Loss for Sale Oil and Additional Sale Oil delivered from Lisburne in July 2014 equals

Line $Loss_{LIS}$ = (.0009) X ($114.26025 – $1.95 – $5.04426 + $3.03310) = $0.09927

Calculating the Price of Sale Oil and Additional Sale Oil

The Price of Sale Oil and Additional Sale Oil delivered from Lisburne in July 2014 is $Price_{LIS}$ = $114.26025 – $1.95 – $5.04426 + $3.03310 – $0.09927 = $110.19982

Note that each number in the equation is rounded to five decimal places. If a number's sixth decimal is 0, 1, 2, 3, or 4, the number shall be truncated to the fifth decimal. If a number's sixth decimal is 5, 6, 7, 8, or 9, the number shall be truncated to the fifth decimal and the fifth decimal shall be increased by 1.

Appendix 3 – Example of Calculation of Interest and Late Payment Penalties

Sample Calculation of an Invoice for July 2014 Deliveries

Assumptions:

1. Month is August 2014.
2. Sale Oil and Additional Sale Oil delivered to the Buyer from Lisburne in July 2014 = 31,000 barrels (1,000 bpd).
3. July 2014 Price of the Sale Oil and Additional Sale Oil for Lisburne as initially estimated by the State = $110.00000 per barrel.
4. Statement of account, with July 2014 invoice, sent to the Buyer on August 2, 2014.
5. July 2014 invoice payment due to the State = August 22, 2014.
6. The Buyer pays State only $1,000,000 on the due date, August 22, and pays the outstanding balance on August 25, 2014.
7. Annual interest rate provided by Alaska Statute 38.05.135(d) for August 2014 is 11 percent.

Method for calculating the Buyer's invoice payment for July 2014 deliveries:

Invoice Amount = Quantity of Sale Oil & Additional Sale Oil × the Buyer's Price of Sale Oil 31,000 × $110.00000 = $3,410,000.00

Because payment in full was not received by the State on or before August 22, 2014, interest will accrue on the unpaid balance from August 22, 2014 through the date the payment is received, and a late payment penalty will be assessed.

Below is a sample calculation of late payment penalty fee (assuming that it is not waived under Section 3.7) and interest. This sample calculation shows what will happen if the Buyer makes a partial payment on August 22 and the balance on August 25.

Late Payment Penalty Fee:		
Statement of Account amount	=	$3,410,000.00
Amount paid on August 22	=	$1,000,000.00
Outstanding balance (8/22/11)	=	$2,410,000.00
Late Payment Penalty Fee ($2,410,000 × 5%)		$120,500.00
Interest:		
$2,410,000 x (11%/365) × 3 Days		$2,178.90
Amount The Buyer owes on August 25, 2014		$2,532,678.90

Note: As more accurate data is received by the State, the State may adjust the Price and/or the actual quantity of Sale Oil and Additional Sale Oil and invoice the Buyer in the initial adjustment invoice submitted with the following Month's (August 2014) statement of account.

Sample Calculation of an Adjustment Invoice in September 2014

Assumptions:

1. Month is September 2014.
2. Sale Oil and Additional Sale Oil delivered in July 2014 has been revised to 30,000 barrels.
3. July 2014's price for Sale Oil and Additional Sale Oil is unchanged at $110.00000 per barrel.
4. Date of the statement of account that contains the adjustment invoice is September 1, 2014.
5. Date the adjustment invoice payment is due to the State = September 20, 2014.

Method for calculating the Buyer's adjustment invoice amount for July 2014:

Invoice Amount	=	Quantity of Sale Oil & Additional Sale Oil x BuyerThe Buyer's Price of Sale Oil
	=	30,000 × $110.00000
	=	$3,300,000.00

Adjusted Invoice Amount for July 2014	=	$3,300,000.00
Amount previously paid by the Buyer for July 2014	=	$3,410,000.00
Overpayment for July 2014	=	($110,000.00)

Credit due the Buyer against statement of account amount dated September 1 due September 20, 2014.

Note: As more accurate data is received by the State, the State may adjust the Price and/or the actual quantity of Sale Oil and Additional Sale Oil and invoice the Buyer in the adjustment invoice submitted with the following Month's (October 2014) statement of account.

Sample Calculation of an Adjustment Invoice in October 2014

Assumptions:

1. Month is October 2014.
2. July 2014's price for Sale Oil and Additional Sale Oil is changed to $110.05000 per barrel due to a change in the quality bank.
3. The statement of account that contains the adjustment invoice is October 4, 2014.
4. The adjusted invoice payment is due to the State = October 20, 2014.

Method for calculating the Buyer's adjustment invoice amount for July 2014:

Production Month Invoice Amount	=	Quantity of Sale Oil & Additional Sale Oil × The Buyer's Price of Sale Oil
	=	30,000 × $110.05000
	=	$3,301,500.00

Adjusted Invoice Amount for July 2014	=	$3,301,500.00
Amount previously paid by the Buyer for July 2014	=	$3,300,000.00

Underpayment for July 2014	$1,500.00

=

The underpayment is due the State on October 20, 2014.

Appendix 4 – Illustration of Proration

Assume that the monthly Royalty Oil is equal to 40,000 barrels per day (bpd). Thus, 95% of that monthly Royalty Oil is 38,000 bpd. Also, suppose that the State has three RIK contracts:

As defined previously, proration will take place whenever the sum of the initial sale oil quantity nominations for all three RIK buyers is greater than 95% of the monthly Royalty Oil.

Case 1: 95% of the monthly Royalty Oil is not enough to meet the initial sale oil quantity nominations from the RIK buyers. In such a case, buyers will be prorated so that each such buyers' Sale Oil quantity as a percentage of total Sale Oil quantities under all contracts after proration is equal to the percentage of its initial monthly sale oil quantity nomination to the total initial monthly sale oil quantity nominations for all the buyers.

	Initial monthly sale oil quantity nomination (BPD)	Monthly Sale Oil quantity after proration (BPD)	
Buyer 1	22,000	16,077	*Prorated*
Buyer 2	18,000	13,154	*Prorated*
Buyer 3	12,000	8,769	*Prorated*
Total	52,000	38,000	

Keeping the assumption that the State has 3 RIK contracts, we could describe the proration provision symbolically.

Let X_i denote the initial monthly sale oil quantity from buyer *i*, where *i* = 1, 2, 3. Let *R* represent the monthly Royalty Oil. And let Y_i be the Sale Oil quantity determined after proration.

$$\rightarrow \text{If } (X_1 + X_2 + X_3) \leq 0.95 \times R, \text{then } Y_i = X_i$$

$$\rightarrow \text{If } (X_1 + X_2 + X_3) > 0.95 \times R, \text{then } Y_i = \left(\frac{X_i}{X_1 + X_2 + X_3}\right) \times 0.95 \times R$$

Appendix 5 – Illustration of Additional Sale Oil Nomination

Assume that the monthly Royalty Oil is equal to 40,000 barrels per day (bpd). Thus, 95% of that monthly Royalty Oil is 38,000 bpd. Also, suppose that the State has three RIK contracts with the following Sale Oil nominations:

	Buyer 1	Buyer 2	Buyer 3
Sale Oil Nomination	10,000 bpd	8,000 bpd	10,000 bpd

Following from that, the State has Excess Royalty Oil of 10,000 bpd arrived at by subtracting total Sale Oil Nominations from 95% of Royalty Oil (38,000 bpd – (10,000 bpd + 8,000 bpd + 10,000 bpd).

Case 1: Excess Royalty Oil is enough to meet all Additional Sale Oil nominations.

	Additional Sale Oil quantity nomination (BPD)	Monthly Sale Oil quantity after allocation (BPD)	
Buyer 1	2,000	2,000	*Original nomination*
Buyer 2	5,000	5,000	*Original nomination*
Buyer 3	2,000	2,000	*Original nomination*
Total	9,000	9,000	< 10,000 bpd of Excess Royalty Oil

Case 2: Excess Royalty Oil is not enough to meet all Additional Sale Oil nominations.

If total nominations for Additional Sale Oil under all of the State's royalty-in-kind contracts exceed Excess Royalty Oil, the State will allocate Excess Royalty Oil. The State may nominate for each buyer up to the actual nominated volume of Additional Sale Oil. If any buyer's actual nominated volume of Additional Sale is not more than equal volumes of Excess Royalty Oil available to each buyer nominating Additional Sale Oil for that period determined by dividing Excess Royalty Oil by the number of nominations for Additional Sale Oil, that buyer will receive its full nomination. Those buyers, whose Additional Sale Oil nominations are not fully met with the calculated equal volumes of Excess Royalty Oil, will equally split the remaining available volumes up to the amount of actual nominated volume of Additional Sale Oil for each buyer. If there are remaining available volumes of Excess Royalty Oil, they will be allocated to the buyers whose actual nominated volume of Additional Sale Oil has not been satisfied.

Equal volumes of Excess Royalty Oil available to each buyer nominating Additional Sale Oil in this scenario is 3,333 bpd derived by dividing 10,000 bpd by 3.

Buyer 1's Additional Sale Oil nomination is fully met with the calculated equal volumes of Excess Royalty Oil, thus Buyer 2 and Buyer 3, whose Additional Sale Oil nominations are not satisfied, will equally split the remaining available volumes at 4,000 bpd each calculated as (10,000 bpd -2,000 bpd)/2, up to the amount of each buyer's actual nomination. This means that Buyer 3 will only receive 3,500 bpd based on its actual nomination and buyer 2 will receive remaining 4,500 bpd.

	Additional Sale Oil quantity nomination (BPD)	Monthly Sale Oil quantity after allocation (BPD)	
Buyer 1	2,000	2,000	*Original nomination*
Buyer 2	6,000	4,500	*Remaining volumes equally split between buyers whose nominations were not met with equal volumes of Excess Royalty Oil (3,333 bpd) available to each buyer nominating Additional Sale Oil up to each buyer's actual nomination*
Buyer 3	3,500	3,500	
Total	11,500	10,000	=10,000 bpd of Excess Royalty Oil

Exhibit 2 – Example "Non-binding Solicitation of Interest"

Non-binding Solicitation of Interest—North Slope Royalty In-Kind Oil Supply

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The Department of Natural Resources (DNR) is inquiring whether there is interest among commercial refiners or other parties to acquire some or all of the State's North Slope royalty in-kind (RIK) oil that may become available for sale when the current RIK supply contract obligations terminate in the third and fourth quarters of 2022 or any additional North Slope royalty volumes that the State chooses to take as RIK oil. If there is substantiated interest expressed by more than one potential buyer for RIK oil, DNR may issue an Invitation to Bid and conduct a sealed-bid auction for the RIK oil consequently.

DNR has received inquiries from potential buyers for multi-year RIK contracts. Under AS 38.05.183, the sale of the state's royalty oil must be by competitive bid except when the Commissioner determines that the best interest of the state does not require competitive bidding or that no competition exists.

We would like to know if your company might be interested in purchasing RIK oil and participating in an auction via a competitive sealed bid mechanism for a contract. We would also like to know the approximate volumetric range (in barrels per day per year) you would require, and the preferred length of the contract term (preferably, not less than three years). **This is an informal, non-binding inquiry and your response will not create any kind of commitment by you or your company/organization.** Your response, and those of other potentially interested parties, will be used only to gauge whether sufficient competition exists for RIK oil, and to determine whether the state will engage in a competitive disposition in the sale of RIK oil.

Below we have described some of the bidding and contractual terms that might apply to such a sale. Of course, they are subject to change depending on circumstances at the time DNR issues an Invitation to Bid, and we invite you to comment on proposed bidding and contractual term.

Proposed Bidding Terms (subject to change):

- Priority Bidders. The Department proposes to create a class of priority RIK bidders who will have preference over the general class of RIK bidders. This priority class of RIK bidders will consist of in-state commercial petroleum processors, as defined under 11 AAC 03.190, that will (1) provide financial guarantees in the form of a stand-by letter of credit, a surety bond, or a parent guarantee from a parent with an investment grade credit rating from one or more recognized credit rating companies (presuming that the Buyer is not the parent), combined with an Opinion Letter provided by a Financial Analyst that is independent from the Buyer, the parent, and the credit rating company, *and* (2) propose effective, viable Special Commitments that, if implemented, would have an impact on lowering in-state energy costs for consumers and addressing the need for a greater supply of crude oil for use in the state. The requirement for proposing Special Commitments is discussed further below.
- Sealed Bid Auction of RIK Oil Lots. RIK oil may be auctioned under fixed or variable lots of no less than 3,000 bpd/year, with an estimated total available amount for sale of 40,000 bpd/year, and potentially varying year by year. Each of these lots would be offered independently for each year, with deliveries likely beginning in the second half of 2022 through the life of the desired contract. As such, a bidder may be able to tailor their RIK oil bids in a manner that comports with its forward-looking expectations concerning demand for RIK oil. The winner of each lot will be the highest responsible bidder, and such a winner may be determined by a procedure that considers, among other potential factors, the lowest "RIK Differential" offered (possibly subject to a reservation price). The RIK Differential is a reducing element in the netback pricing method described below. You are invited to comment on this broad auction framework and bidding approach presented and define your volumetric range requirements for RIK oil.

- Reservation Fee. During the term of the contract, and within certain timing and volumetric limits, a buyer may change their monthly nomination to a quantity less than the maximum volume defined in a lot. This provides operational flexibility for a buyer to match its monthly RIK oil supply to its refinery's requirements. Such flexibility, however, comes at a cost to the State by preventing the sale of the remainder of the lot as RIK. To compensate for this cost, the State proposes to institute a per-barrel reservation fee assessed on those barrels below the RIK lot maximum not nominated by the buyer. You are invited to comment on your preferred mechanism for implementing such a reservation fee.
- Bid Process. Upon evaluating responses to this Non-Binding Solicitation of Interest, the Department may distribute a public notice and a formal Invitation to Bid to all potential buyers and the public outlining the auction process in more detail, if a competitive disposition is selected. Bidders will have at least 30 days after the Invitation to Bid is published to submit bids and documentation.

Proposed Contractual Terms for RIK Disposition (subject to change):

- Sale Oil Quantity. The contract will specify the volume, or "Sale Oil Quantity," awarded as a result of the nomination or auction. For example, if RIK oil is auctioned in different lots, and a buyer successfully bids on several of them, a single RIK Contract would include the total Sale Oil Quantity from all the lots. The State expects each nomination or bid to be for at least 3,000 bpd/year. Proposals are sought for nomination ranges from potential buyers.
- State's RIK Nomination. Because the State must nominate with at least 90 days in advance to take its royalty oil in-kind, all contracts will provide that DNR will make commercially reasonable efforts to nominate, in accordance with applicable Unit Agreements, percentages of the State's estimated royalty oil from one or more Units that will equal the Sale Oil Quantity nominated by the buyer. The nomination procedures are basically unchanged from every RIK contract offered by the Department since the first production of oil at the Prudhoe Bay Unit. Any former or current buyer of RIK oil should be familiar with these procedures.
- Volumetric Limits and Proration. The actual Sale Oil Quantity delivered to all RIK oil buyers may be lower than their total initial nominations. DNR reserves the right to limit total Sale Oil Quantity delivered to all RIK oil buyers to a maximum of 95% of the State's estimated royalty oil. Whenever total initial nominations by all buyers exceed 95% of the State's estimated royalty oil, proration takes effect and affects RIK buyers' initial nominations. DNR is considering several proration mechanisms. You are invited to provide thoughts concerning an appropriate proration mechanism.
- Price. The price for the Sale Oil is calculated as a simple netback price. The formula starts with a destination value for the State's royalty oil on the US West Coast minus the RIK Differential. The RIK Differential is a numeric variable that may be used as the bid variable in the case of a competitive disposition. The ownership-weighted average interstate tariff for TAPS and tariffs for pipelines upstream of TAPS Pump Station No. 1 are also subtracted depending on the source of the RIK that will be supplied to the buyer. The price formula also includes a Quality Bank Adjustment and an allowance for line loss. The price provision in the contract will stipulate that the value of RIK is bounded below by zero. DNR is open to suggestions for a constant or variable RIK Differential value and process. Your thoughts concerning the appropriate pricing indexes to value ANS on the US West Coast are also welcome.
- Contract term. The contract will supply RIK oil for at least three years, based on disposition preferences and terms.
- Security Arrangements. The security arrangements protect the State from the risk of default by requiring a stand-by letter of credit, a surety bond, or a parent guarantee, if the buyer is not the parent, combined with an Opinion Letter provided by a Financial Analyst that is independent from the Buyer, the parent, and the credit-rating company.
- Special Commitments. Bidders may be required to propose Special Commitments that will be incorporated into the RIK contract. The Special Commitments should propose means to mitigate the high cost of consumer petroleum products in Alaska and address the need for a greater supply of crude oil for use in the state. Examples of a Special Commitments might be a commitment to make a substantial capital investment to support in-state processing, a commitment to lowering the cost of petroleum products to the consumer and others, etc. You are invited to comment on how Special Commitments might affect your interest in RIK oil and offer alternatives.

I will appreciate a written response to this informal solicitation by September 30, 2021. In the meantime, I invite you to contact Jhonny Meza at jhonny.meza@alaska.gov to discuss this letter. As stated above, this is an informal, non-binding inquiry and your response will not create any commitment by you or your company.

Sincerely,

Tom Stokes
Director
Division of Oil and Gas

Exhibit 3 – Informal Solicitation responses regarding the purchase of the State's RIK

Telephone:907.339.6600
Fax: 907.339.6652

PETRO STAR INC.

3900 C Street Suite 802
Anchorage, AK 99503-5963

September 30, 2021

Department of Natural Resources
Division of Oil & Gas
Attn: Tom Stokes, Director
550 W. 7th Avenue, Suite 1100
Anchorage, Alaska 99501-3560
Via email: jhonny.meza@alaska.gov

Re: Non-binding Solicitation of Interest – North Slope Royalty In-Kind Oil Supply

Dear Mr. Stokes,

Petro Star Inc. (Petro Star) is proud to be Alaska's only locally owned refiner and a strong industry partner of the state. As in 2020, we are thankful for the opportunity to indicate our interest in a long-term supply of 10,000 barrels/day of ANS royalty in-kind (RIK) oil and respond to the additional inquiries in the Department of Natural Resource's non-binding solicitation of interest issued August 27, 2021. Throughout this process Petro Star remains eager to grow our local workforce and continue providing quality refined products throughout the State of Alaska.

Petro Star is interested in participating in an auction for a contract (not to exceed a term of five years) to purchase RIK oil, and is interested in participating in a competitive sealed bid auction for the RIK oil, should DNR determine that is necessary. Petro Star believes that it meets the qualifications necessary to be considered in the priority class of RIK bidders, should one be established, due to (a) its status as an in-state commercial petroleum processor that has previously provided a financial guarantee, as demonstrated by its current RIK contract; and (b) its continued commitment to the State of Alaska to provide logistical efficiencies and new products. As a brief summary, I've listed the following Special Commitments that Petro Star has already implemented as part of the State's incentives for in-state refinery investment from 2015-2019:

- After the departure of Flint Hills in 2014, Petro Star reinstated a local source of asphalt oil supply to the Interior, benefitting the Dept. of Transportation projects through improved transportation costs when it commissioned a new vacuum unit at the North Pole Refinery in 2016;
- Through a long-term agreement with Golden Valley Electrical Association (GVEA), Petro Star provided a new light straight run turbine fuel from its North Pole Refinery naphtha splitter, reducing rate payer costs in the Interior by 30% in its first year (2017);
- In support of the consent decree issued by the State Attorney General, Petro Star successfully assumed operations of a terminal at the Port of Alaska in 2018 and expanded its footprint to include rail loading and offloading, allowing for more efficient fuel movements statewide;
- In concert with this expansion and the Alaska Railroad, Petro Star constructed a new fuel terminal in the Fairbanks Rail Depot, providing additional Interior fuel storage in advance of the new ADEC Air Quality regulatory changes and in support of increased North Slope production activities (2019); and
- Petro Star recently completed a debottlenecking exercise at its North Pole Refinery to support increased production of #1 heating oil after the mandatory fuel switch from #2 heating oil for Interior residents is implemented in September 2022.

As this summary demonstrates, Petro Star's commitment to deliver affordable fuel to the State of Alaska and consumers while addressing the need for greater supply of fuel for use in the State is unmatched. Unfortunately, the State of Alaska has not met that commitment as it promised, leaving Petro Star with $39.2M in unpaid tax credits.

Petro Star has been a willing and eager participant to the RIK process during its current contract term, utilizing its monthly nominations regularly, with only brief interruptions for turnaround activities in May each year. This, despite being allocated less RIK than requested in 2016, forcing Petro Star to source crude oil from a second and third supplier to supplement its RIK volumes. Due to these arrangements, Petro Star wishes to continue its RIK oil supply on a more limited basis at 10,000 bpd going forward. Given the bidding lots proposed in the State's solicitation of interest, Petro Star would seek a ratable volume of 10,000 bpd (or 2 lots) annually for the term of the contract so as to allow it to continue its second- and third-party supplier arrangements. With regard to the reservation fee, Petro Star fails to see how this would allow for additional flexibility for the buyer given the costs associated with such changes. Petro Star already pays for such flexibility in its alternative crude supply contracts, and is unlikely to avail itself of the flexibility offered in this manner given its additional cost.

We thank DNR for the opportunity to submit these comments and as always, welcome any feedback or questions.

Regards,

Angela Speight

Angela Speight
SVP & COO

MARATHON

Marathon Petroleum Supply and Trading LLC
A subsidiary of Marathon Petroleum Corporation

539 South Main Street
Findlay, OH 45840

September 27, 2021

State of Alaska
Department of Natural Resources
Division of Oil and Gas
550 W. 7th Avenue, Suite 1100
Anchorage, Alaska 99501-3560
Attn: Tom Stokes, Director

RE: Response to Non-binding Solicitation of Interest – North Slope Royalty In-Kind Oil Supply

Dear Mr. Stokes:

In response to your Non-binding Solicitation of Interest – North Slope Royalty In-Kind Oil Supply dated August 26, 2021 (the "Solicitation"), Marathon Petroleum Supply and Trading LLC ("Marathon") writes to confirm that Marathon does have an interest in purchasing royalty in-kind volumes of ANS crude oil from the State of Alaska (the "State"). Marathon is an affiliate of Tesoro Alaska Company LLC ("Tesoro Alaska"). Marathon currently purchases royalty-in kind ANS from the State under an Agreement for the Sale and Purchase of Royalty Oil effective August 1, 2021 (the "Agreement"). Marathon is interested in continuing to purchase similar volumes from the State as are currently purchased under the Agreement. Marathon anticipates that volumes purchased from the State would continue to be used primarily for refining at Tesoro Alaska's Kenai refinery, providing consumers in Alaska with a reliable supply of refined products.

Marathon respectfully suggests that, instead of a bid process, the State again engage in bilateral negotiations with interested parties for future royalty in-kind purchases. Marathon is interested in maintaining the operational flexibility contained in the existing Agreement and is not interested in paying a reservation fee. These items and others are best addressed through a negotiation process.

Marathon appreciates the opportunity to comment on the proposed terms for the Solicitation. As outlined in the Solicitation, this response does not create any binding commitment on the part of Marathon to acquire any crude oil or agree to any terms proposed for the sale.

Sincerely,

Daniel T. Kimmel
Vice President, Crude Oil Trading
Marathon Petroleum Supply and Trading LLC

ConocoPhillips
Alaska

Joe Kotarski
Senior Commercial Consultant
Strategy & Commercial
700 G Street
Anchorage, AK 99501

September 27, 2021

Mr. Tom Stokes
Director, Division of Oil and Gas
Department of Natural Resources
550 W. 7th Avenue, Suite 1100
Anchorage, AK 99501 – 3560

Re: Non-binding Solicitation of Interest – North Slope Royalty-in-Kind Oil Supply

Dear Director Stokes,

Thank you for your letter of August 26th, 2021, inviting ConocoPhillips to consider acquiring some or all of the State's North Slope royalty-in-kind. At this time ConocoPhillips does not wish to participate.

We appreciate the invitation. Please keep us in mind in the future.

Sincerely,

Joe Kotarski
Senior Consultant

Exhibit 4 – Letter to the Royalty Board regarding non-competitive disposition

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Natural Resources

OFFICE OF THE COMMISSIONER

550 West 7th Avenue, Suite 1400
Anchorage, AK 99501-3561
Main: 907.269.8431
Fax: 907.269.8918

October 21, 2021 VIA E-MAIL

Mr. Mark Johnson
Chair of the Alaska Royalty Oil and Gas Development Advisory Board
johnsonmkgw@gmail.com
(907) 345-3850

Re: Proposed waiver of competitive bidding by the Alaska Department of Natural Resources to offer Alaska North Slope royalty oil via a non-competitive sale

Dear Mr. Johnson:

Pursuant to Alaska Statute ("AS") 38.05.183(a), AS 38.06.050, 11 AAC 03.030(a), and 11 AAC 03.040, the Alaska Department of Natural Resources ("DNR") hereby provides notice to the Alaska Royalty Oil and Gas Development Advisory Board (the "Royalty Board") of its intent to offer for sale Alaska North Slope ("ANS") royalty oil in a non-competitive manner.

AS 38.05.183(a) requires that the "sale […] of a mineral obtained by the state as a royalty […] shall be by competitive bid […], except that competitive bidding is not required when the commissioner, after prior written notice to the Alaska Royalty Oil and Gas Development Advisory Board […], determines that the best interest of the state does not require it or that no competition exists." Moreover, AS 38.06.050(c) provides that "competitive bidding in a sale [of ANS royalty oil] may not be waived by the commissioner of natural resources under AS 38.05.183 unless prior written notice of proposed waiver is given to the [Royalty Board]."

On August 26, 2021, DNR published a non-binding letter addressed to parties who might have an interest in acquiring ANS royalty oil in the next few years and asking them to comment on DNR's proposed terms for conducting a sale of the ANS royalty oil (the "Solicitation of Interest Letter"). A copy of this letter can be found at https://aws.state.ak.us/OnlinePublicNotices/Notices/View.aspx?id=203541. DNR established a deadline of September 30 to submit responses to the Solicitation of Interest Letter. By this date, DNR received only three responses to this letter from ConocoPhillips Alaska, Inc. ("CPAI"), Marathon Petroleum Supply and Trading LLC ("Marathon"), and Petro Star Inc. ("Petro Star"). With respect to their desire to acquire ANS royalty oil from the state, CPAI stated no interest, whereas both Marathon and Petro Star responded affirmatively. With respect to the terms of the sale of ANS royalty oil proposed by DNR, Marathon highlighted its preference for a bilateral negotiation rather than participating in a bid process. On the other hand, Petro Star showed interest in participating in an auction (i.e., competitive sale of ANS royalty oil).

Given that only two parties show interest in acquiring ANS royalty oil from the state *and* that only one of them is willing to participate in an auction, DNR determines that a competitive sale is not warranted and that the best interests of the state are not harmed by conducting this sale in a non-competitive manner. Pursuant to AS 38.05.183(c), DNR "shall make public in writing the specific findings and conclusions on which [this] determination is based." In this way, and pursuant to 11 AAC 03.030(c) and 03.040, DNR will provide the basis and specific findings for this proposal in a Best Interest Finding and Determination ("BIF") by the time a proposed contract for the sale of ANS royalty oil is presented to the Royalty Board for review.

Sincerely,

Corri A. Feige

Corri A. Feige, Commissioner of the Alaska Department of Natural Resources

CC:
Members of the Alaska Royalty Oil and Gas Development Advisory Board:

- Martin Anderson, martyusak@me.com
- David Eisenberg, david@davidceisenberg.com
- Ted Leonard, Tjleonard205@gmail.com
- Thomas Walsh, twalsh@petroak.com
- Julie Anderson, Commissioner of the Alaska Department of Commerce, Community, and Economic Development, julie.anderson@alaska.gov
- Colleen Glover, Director of the Tax Division, Alaska Department of Revenue (Commissioner Designee), colleen.glover@alaska.gov

Tom Stokes, Director, Division of Oil and Gas
Justin Black, Deputy Director, Division of Oil and Gas
Haley Paine, Deputy Director, Division of Oil and Gas
Emily Feenstra, Attorney 4, Alaska Department of Law
Jhonny Meza, Commercial Manager, Division of Oil and Gas

Exhibit 5 - Notice of the publication of the Preliminary Best Interest Finding and an invitation for public comment

ANCHORAGE DAILY NEWS
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STATE OF ALASKA
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Adam Garrigus being first duly sworn on oath deposes and says that she is a representative of the Anchorage Daily News, a daily newspaper. That said newspaper has been approved by the Third Judicial Court, Anchorage, Alaska, and it now and has been published in the English language continually as a daily newspaper in Anchorage, Alaska, and it is now and during all said time was printed in an office maintained at the aforesaid place of publication of said newspaper. That the annexed is a copy of an advertisement as it was published in regular issues (and not in supplemental form) of said newspaper on

02/03/2022

and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is not in excess of the rate charged private individuals.

Signed

Subscribed and sworn to before me
this 7th day of February 2022.

Notary Public in and for
The State of Alaska.
Third Division
Anchorage, Alaska

MY COMMISSION EXPIRES
7/14/2024

Alaska Department of Natural Resources, Division of Oil and Gas, Notice of Preliminary Best Interest Finding and Determination for a proposed sale of North Slope Royalty Oil to Petro Star Inc.

The Division of Oil and Gas is seeking comments regarding the Commissioner's "Preliminary Best Interest Finding and Determination for the Sale of Alaska North Slope Royalty Oil to Petro Star Inc." The Department of Natural Resources proposes to sell the State's North Slope royalty in-kind oil to Petro Star Inc. for processing at its refineries in North Pole and Valdez. The amount of royalty oil contemplated under this proposed contract is as follows: approximately 12,500 barrels per day during the first two years and between 10,000 and 12,500 barrels per day during the remaining three years of the proposed five-year term of the contract. The deadline for comments on this Preliminary Best Interest Finding and Determination is 4:30 PM AST, March 2, 2022.

The Commissioner of the Department of Natural Resources proposes to sell royalty oil from the State oil and gas leases on the North Slope under a five-year contract. Deliveries of royalty oil under this proposed contract will have an estimated starting date of January 1, 2023 and continue until December 31, 2027. The price provision in the proposed contract is based on a formula that relies on accepted industry price reporting services and resembles the formulas used to calculate value of royalty oil paid to the State by the North Slope producers. The Commissioner's Preliminary Best Interest Finding and Determination includes a draft of the sales contract, provides an analysis of its specific provisions, and how it will serve the best interests of the state under the criteria set out in AS 38.05.183 and AS 38.06.070.

The public can access this document at: https://dog.dnr.alaska.gov/Library/

These findings are preliminary; and final conclusions have not been reached. Comments received from the public and from the Royalty Board will be used to determine whether the proposed sales contract is in the state's best interest. If the Commissioner determines that the proposed sale is in the state's best interest and if the Royalty Board recommends that the sale go forward, a bill will be introduced in the legislature to approve the contract.

Comments should be emailed to: sean.clifton@alaska.gov

Or mailed to:

Division of Oil and Gas
550 W. 7th Avenue, Suite 1100
Anchorage, Alaska 99501-3563
Phone: (907) 269-8800

PUB: 2/3/2022

JADA L. NOWLING
Notary Public
State of Alaska
My Commission Expires Jul 14, 2024

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Publishers Affidavit of Publication

I, Susan Crane being duly sworn and say, I am advertising director of Petroleum News published in Anchorage, Alaska; and being the official legal organ of said city/state, and that the advertisement (DNR,) a printed copy of which is attached hereto, was printed and published in said newspaper/magazine (1/2) on February 6, 2022.

Susan Crane ,(Sign) Susan Crane

Susan Crane ,(Print)

Feb. 16, 22 ,Date

Hereby subscribed and sworn to me before me on this 16th day of february , 2022.

JOHN CULBERTSON
Notary Public
State of Alaska
My Commission Expires Mar 22, 2025

Notary Public

My commission expires on mar 22nd 2025 .

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RIK FINDINGS

oil, and the state receives the value of its royalty share. With RIK, the state assumes ownership of the oil and the DNR commissioner disposes of it through either a competitive or non-competitive sale.

From November 1979 through November 2021 the state disposed of 967 million barrels through RIK sales, some 46% of North Slope royalty oil, the finding said. The state has sold its royalty oil to in-state refineries and occasionally has auctioned its royalty oil to Lower 48 customers.

The finding said that since 1986 the state has disposed of its RIK oil through negotiated non-competitive sales.

Marathon

The preliminary best interest finding and determination for the royalty in kind, RIK, sale to Marathon said the contract has a term of three years.

"The sale of royalty oil under the proposed contract will help meet the in-state need for crude and help facilitate continued operations of Marathon's Kenai refinery, which has been operating since 1969, with the attendant benefits to Alaskans," the finding says.

Meeting in-state need for crude and benefitting Alaskans "are paramount in the State's decision to sell royalty in-kind to Marathon through the contract."

A third concern in negotiating the contract was to avoid interruptions to delivery of RIK oil to in-state refineries.

The next step is to seek legislative approval and review of the Royalty Oil and Gas Development Board for the contract.

The volume of oil the state receives depends on the value of oil produced and the proposed Marathon contract calls for delivery of between 10,000 barrels per day and 15,000 bpd between Aug. 1, 2022, and July 31, 2025.

Meeting in-state need for crude and benefitting Alaskans "are paramount in the State's decision to sell royalty in-kind to Marathon through the contract." A third concern in negotiating the contract was to avoid interruptions to delivery of RIK oil to in-state refineries.

The finding said that based on average forecast volumes, between 48,000 bpd and 66,000 bpd are expected to be available, so Marathon's nomination under the proposed contract could represent between 15% and 31% of the state's North Slope royalty oil.

Marathon's current RIK contract obligates the state to deliver between 10,000 bpd and 15,000 bpd between Aug. 1, 2021, and July 31, 2022.

Key considerations

The finding said there are three key considerations for the state in considering how much RIK oil to sell.

The state wants to keep a small percentage in RIK "due to higher royalty values for certain leases, and to obtain pricing and other information from in-value dispositions for comparison purposes."

The state limits its RIK contracts to 95% of its North Slope royalty oil.

A second consideration is that expected royalty production is based on a forecast, and, the finding said, even the best forecast will probably be incorrect. "Historically, the State has experienced periods where production forecasts from which the royalty forecast is derived have been optimistic, with realized production often falling below forecasted levels."

The third condition is seasonal variation in North Slope production, with production peaking in the winter and reaching its lowest levels in the summer. "This seasonality is part of the consideration when negotiating nomination ranges with refineries," the finding said.

The state receives more revenue from RIK sales than from RIV sales, the finding said, and while that isn't the only criteria used in evaluating the best interest of the state, the state does have a duty to generate as much revenue as it can from its royalty oil.

State refineries

The finding said there are five active refineries in the state, operated by four organizations — Hilcorp, ConocoPhillips, Petro Star and Marathon.

Three of the refineries produce refined petroleum for the consumer market — Marathon's Kenai refinery, Petro Star's North Pole refinery and Petro Star's Valdez refinery. All three refine Alaska crude and provide refined petroleum products to the Alaska market.

The Petro Star refineries exclusively refine ANS drawn from the trans-Alaska oil pipeline.

The North Pole refinery has a maximum throughput capacity of 22,000 bpd; Valdez has a maximum throughput capacity of 60,000 bpd.

The Petro Star refineries produce some 65% jet fuel. The remaining output is ultra-low sulfur diesel, asphalt and heating oil.

Marathon's Kenai refinery is not tied to the trans-Alaska oil pipeline. Some feedstock arrives over water, and can come from the Valdez Marine Terminal, Cook Inlet or the world market. The finding said the Kenai refinery only receives non-Alaska crude on an infrequent basis, with some 90% of its input in recent years from the North Slope or Cook Inlet.

Because the Marathon refinery is not connected to the trans-Alaska oil pipeline, it cannot re-inject unprocessed portions of the crude back into the pipeline, so those portions not refined into salable product, the heavy ends, "must be loaded onto a ship and transported to another Marathon facility (or sold to a third party) for further processing. Furthermore, unlike the Petro Star North Pole and Valdez refiners, which fuel the refineries with the crude extracted from TAPS, Marathon fuels its refinery with natural gas from Cook Inlet," the finding said.

Most of the refined product from Marathon's Kenai refinery is consumed in Alaska, with jet fuel going via pipeline to Anchorage, where the majority of that jet fuel consumed at Ted Stevens Anchorage International Airport. The finding noted that the Kenai refinery does retain the ability to ship refined product out of the state.

RIK and Alaska commercial refining

All four commercial refineries in Alaska — the three operating and a fourth refinery that closed in 2014 — have had RIK contracts at various points, the finding said.

"Three of these four refineries refined royalty oil, while a royalty contract backstopped financing for the fourth."

The state has supplied RIK to the Kenai refinery sporadically beginning in 1980, with the refinery purchasing a total of 262.4 million barrels under nine RIK contracts.

"DNR believes the proposed RIK contract with Marathon is important to meeting in-state demand for crude and to facilitating the continued operation of the Kenai Refinery, with the attendant positive implications on the economy of the state," the finding said.

Petro Star contract

The proposed Petro Star contract is for five years with Arctic Slope Regional Corp., which owns Petro Star, as guarantor. Petro Star has two refineries. The North Pole refinery was built in 1985 and the Valdez refinery was completed in 1993.

The proposed contract with Petro Star is for 12,500 bpd between Jan. 1, 2023, and Dec. 31, 2024, and between 12,500 and 10,000 bpd between Jan. 1, 2025, and Dec. 31, 2027.

Of the state's forecast RIK of between 48,000 and 67,000 bpd, the Petro Star nominations represent between 19% and 22%.

The state has sold RIK to Petro Star sporadically since 1986, supplying the two refineries some 27 million barrels of North Slope RIK over that period.

The finding said a 1992 contract with the Petro Star Valdez Joint Venture was a 10-year contract to supply the proposed Valdez refinery with up to 30,000 bpd. "With this contract in hand, the joint venture secured the needed financing and constructed the Valdez refinery." The finding said the contract helped the JV secure financing because it demonstrated "guaranteed access to an on-going supply of feedstock."

The Valdez refinery never took possession of an RIK under that contract, securing its supply from the private market.

—KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

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NEW DIRECTOR

Gathering Center 2 reservoir development team from 2018 to 2020 and the Flow Station 2 reservoir development team from 2015 to 2018.

He was responsible for leading geoscientists, reservoir engineers and petroleum engineers in continued flood management, drilling programs and workover programs in those areas of the Prudhoe Bay field.

From March 2013 to January 2015 Nottingham was reservoir management team lead, heading a group of reservoir engineers and geoscientists responsible for progressing development plans for the Prudhoe Bay Ivishak waterflood and the Sag River reservoirs in Prudhoe Bay.

From January 2009 to March 2013 he worked for BP as a reservoir engineer where he was responsible for flood management, production forecasting, and development planning for the Sag River reservoir (2010-2013) and the Eileen West End Ivishak reservoir (2008-2010).

Before that Nottingham worked for Chevron for a little over six years, most recently as a reservoir engineer for the company's Cook Inlet assets, and prior to that as an asset development engineer in the Gulf of Mexico Shelf.

Nottingham replaced Tom Stokes who retired from the division in January.

—KAY CASHMAN

Contact Kay Cashman at publisher@petroleumnews.com